

GADGETSLIB

Conversion program

COLLABORATORS

	<i>TITLE :</i> GADGETSLIB		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Conversion program	October 9, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1	GADGETSLIB	1
1.1	Overview of GADGETSLIB	1
1.2	GADGETSLIB	1
1.3	GADGETSLIB	1
1.4	GADGETSLIB	2
1.5	GADGETSLIB	2
1.6	GADGETSLIB	3
1.7	GADGETSLIB	3
1.8	GADGETSLIB	5
1.9	GADGETSLIB	5
1.10	GADGETSLIB	6
1.11	GADGETSLIB	6
1.12	GADGETSLIB	6
1.13	GADGETSLIB	7
1.14	GADGETSLIB	7
1.15	GADGETSLIB	7
1.16	GADGETSLIB	8
1.17	GADGETSLIB	8
1.18	GADGETSLIB	8
1.19	GADGETSLIB	8
1.20	GADGETSLIB	9
1.21	GADGETSLIB	9
1.22	GADGETSLIB	9
1.23	GADGETSLIB	10
1.24	GADGETSLIB	10
1.25	GADGETSLIB	10
1.26	GADGETSLIB	11
1.27	GADGETSLIB	11
1.28	GADGETSLIB	11
1.29	GADGETSLIB	11

1.30 GADGETSLIB	12
1.31 GADGETSLIB	12
1.32 GADGETSLIB	12
1.33 GADGETSLIB	13
1.34 GADGETSLIB	13
1.35 GADGETSLIB	13
1.36 GADGETSLIB	14
1.37 GADGETSLIB	14
1.38 GADGETSLIB	14
1.39 GADGETSLIB	15

Chapter 1

GADGETSLIB

1.1 Overview of GADGETSLIB

Overview

An Acid Software Library

Converted to AmigaGuide by

Red When Excited Ltd

Used with the permission of Acid Software

Edited, fixed and cleaned by Toby Zuijdveld 26/02/1999.
mailto:hotcakes@abacus.net.au

1.2 GADGETSLIB

Statement: SetPropInfo

Modes : Amiga

Syntax : SetPropInfo GadgetList#,Id,visible,total[,current]

This command allows you to setup proportional gadgets so that they can be used like gadgets from the gadtools library. Thus you can set the size of the pot and body of a propgadget by specifying values like total and visible - just like the GadTools GTScroller command.

A gadget setup using this command can still be used in the traditional manner.

1.3 GADGETSLIB

Statement: GetPropCurrent

Modes : Amiga

Syntax : pos=GetPropCurrent (GadgetList#,Id)

Returns the current position of a proppgadgets body. Note that the proppgadget must have been setup with the SetPropInfo command before you can call this command on it. The return value of this command will be the current position of the body, in the range of 0 to (total-visible).

1.4 GADGETSLIB

Statement: MoveProp

Modes : Amiga

Syntax : MoveProp GadgetList#,Id,current[,window_redraw]

This command allows you to set a proportional gadgets position. It should only be used on gadgets that have been previously initialised with SetPropInfo.

The optional window_redraw flag allows you to specify whether or not this gadget should be redraw straight after the change has been made.

1.5 GADGETSLIB

Statement: TextGadget

Modes :

Syntax : TextGadget GadgetList#,X,Y,Flags,Id,Text\$

The TextGadget command adds a text gadget to a gadgetlist. A text gadget is the simplest type of gadget consisting of a sequence of characters optionally surrounded by a border.

Flags should be selected from the table at the start of the chapter.

Boolean gadgets are the simplest type of gadget available. Boolean gadgets are 'off' until the program user clicks on them with the mouse, which turns them 'on'. When the mouse button is released, these gadgets revert back to their 'off' state. Boolean gadgets are most often used for 'OK' or 'CANCEL' type gadgets.

Toggle gadgets differ in that each time they are clicked on they change their state between 'on' and 'off'. For example, clicking on a toggle gadget which is 'on' will cause the gadget to be turned 'off', and vice versa.

X and Y specify where in the window the gadget is to appear. Depending upon the Flags setting, gadgets may be positioned relative to any of the 4 window edges. If a gadget is to be positioned relative to either the right or bottom edge of a window, the appropriate X or Y parameter should be negative.

Id is an identification value to be attached to this gadget. All gadgets in a gadgetlist should have unique Id numbers, allowing you to detect which gadget has been selected. Id may be any positive, non-zero number.

Text\$ is the actual text you want the gadget to contain.

1.6 GADGETSLIB

Statement: StringGadget

Modes :

Syntax : StringGadget GadgetList#,X,Y,Flags,Id,Maxlen,Width

StringGadget allows you to create an Intuition style 'text entry' gadget. When clicked on, a string gadget brings up a text cursor, and is ready to accept text entry from the keyboard.

X and Y specifies the gadgets position, relative to the top left of the window it is to appear in.

See the beginning of the chapter for the relevant Flags for a string gadget.

Id is an identification value to be attached to this gadget. All gadgets in a gadgetlist should have unique Id numbers, allowing you to detect which gadget has been selected. Id may be any positive, non-zero number.

Maxlen refers to the maximum number of characters which may appear in this gadgets.

Width refers to how wide, in pixels, the gadget should be. A string gadget may have a width less than the maximum number of characters it may contain, as characters will be scrolled through the gadget when necessary.

You may read the current contents of a string gadget using the StringText function.

1.7 GADGETSLIB

Statement: PropGadget

Modes :

Syntax : PropGadget GadgetList#,X,Y,Flags,Id,Width,Height,[propflags, ←
propactivation[,typemask]]

The PropGadget command is used to create a 'proportional gadget'. Proportional gadgets present a program user with a 'slider bar', allowing them to adjust the slider to achieve a desired effect. Proportional gadgets are commonly used for the 'R G B' sliders seen in many paint packages.

Proportional gadgets have 2 main qualities - a 'pot' (short for potentiometer) setting, and a 'body' setting.

The pot setting refers to the current position of the slider bar, and is in the range 0 through 1. For example, a proportional gadget which has been moved to 'half way' would have a pot setting of '.5'. The body setting refers to the size of the units the proportional gadget represents, and is again in the range 0 through 1. Again taking the RGB colour sliders as an example, each slider is intended to show a particular value in the range 0 through 15 - giving a unit size, or body setting, of 1/16 or '.0625'.

Put simply, the pot setting describes 'where' the slider bar is, while the body setting describes 'how big' it is.

Proportional gadgets may be represented as either horizontal slider bars, vertical slider bars, or a combination of both.

See the beginning of the chapter for relevant Flags settings for prop gadgets.

X and Y refer to the gadgets position, relative to the top left of the window it is opened in.

Width and Height refer to the size of the area the slider should be allowed to move in.

Id is a unique, non zero number which allows you to identify when the gadget is manipulated.

Proportional gadgets may be altered using the SetVProp and SetHProp commands, and read using the VPropPot, VPropBody, HPropPot and HPropBody functions.

New Parameters

=====

This new version of the PropGadget command allows you to specify extra flag values for the gadget. When you use this extra values, the propgadget is initialised using the OS flags. That is, all the flags defined in the OS include files can be used, allowing the use of flags like PROPNEWLOOK to make the gadget look like it belongs in OS2+.

The parameter 'flags' is changed when using the extra parameters to represent actual OS include file defined flags.

The extra parameters are:

propflags Define propgadget specific flags (e.g PROPNEWLOOK)
 propactivation Control activation situations for the gadget
 type Change type of gadget (e.g. make it a GIMMEZEROZERO
 border gadget)

1.8 GADGETSLIB

Statement: ArrowGadget

Modes :

Syntax : ArrowGadget GadgetList#,Id,direction,x,y,relativity[,special_flags]

This is a new command for this library that allows you to access the OS provided set of four arrow gadgets. These arrow gadgets can be seen in the borders of Workbench windows. This command allows you to use these arrow gadgets as normal gadgets inside your GadgetLists.

Relativity is defined as:

#RIGHTREL =%1 Relative to right of window
 #BOTTOMREL =%10 Relative to bottom of window

Special flags is made up of:

#ISGZZGADGET =%1 Put in border of a GIMMEZEROZERO window
 #IMMEDIATE =%10 Hear #IDCMP_GADGETDOWN events from this
 gadget

Direction is one of:

#LEFTIMAGE =\$0A Left-arrow gadget image
 #UPIMAGE =\$0B Up-arrow gadget image
 #RIGHTIMAGE =\$0C Right-arrow gadget image
 #DOWNIMAGE =\$0D Down-arrow gadget image

1.9 GADGETSLIB

Statement: ShapeGadget

Modes :

Syntax : ShapeGadget GadgetList#,X,Y,Flags,Id,Shape#[,Shape#]

The ShapeGadget command allows you to create gadgets with graphic imagery. The Shape# parameter refers to a shape object containing the graphics you wish the gadget to contain.

The ShapeGadget command has been extended to allow an alternative image to be displayed when the gadget is selected.

All other parameters are identical to those in TextGadget.

1.10 GADGETSLIB

Statement: SetHProp

Modes :

Syntax : SetHProp GadgetList#,Id,Pot,Body

SetHProp is used to alter the horizontal slider qualities of a proportional gadget. Both Pot and Body should be in the range 0 through 1.

If SetHProp is executed while the specified gadget is already displayed, execution of the ReDraw command will be necessary to display the changes.

For a full discussion on proportional gadgets, please refer to the PropGadget command.

1.11 GADGETSLIB

Statement: SetVProp

Modes :

Syntax : SetVProp GadgetList#,Id,Pot,Body

SetVProp is used to alter the vertical slider qualities of a proportional gadget. Both Pot and Body should be in the range 0 through 1.

If SetVProp is executed while the specified gadget is already displayed, execution of the ReDraw command will be necessary to display the changes.

For a full discussion on proportional gadgets, please refer to the PropGadget command.

1.12 GADGETSLIB

Function: HPropPot

Modes :

Syntax : HPropPot (GadgetList#,Id)

The HPropPot function allows you to determine the current 'pot' setting of a proportional gadget. HPropPot will return a number from 0 up to, but not including, 1, reflecting the gadgets current horizontal pot setting.

Please refer to the PropGadget command for a full discussion on proportional gadgets.

1.13 GADGETSLIB

Function: HPropBody

Modes :

Syntax : HPropBody (GadgetList#,Id)

The HPropBody function allows you to determine the current 'body' setting of a proportional gadget. HPropBody will return a number from 0 up to, but not including, 1, reflecting the gadgets current horizontal body setting.

Please refer to the PropGadget command for a full discussion on proportional gadgets.

1.14 GADGETSLIB

Function: VPropPot

Modes :

Syntax : VPropPot (GadgetList#,Id)

The VPropPot function allows you to determine the current 'pot' setting of a proportional gadget. VPropPot will return a number from 0 up to, but not including, 1, reflecting the gadgets current vertical pot setting.

Please refer to the PropGadget command for a full discussion on proportional gadgets.

1.15 GADGETSLIB

Function: VPropBody

Modes :

Syntax : VPropBody (GadgetList#,Id)

The VPropBody function allows you to determine the current 'body' setting of a proportional gadget.

VPropBody will return a number from 0 up to, but not including, 1, reflecting the gadgets current vertical body setting.

Please refer to the PropGadget command for a full discussion on proportional gadgets.

1.16 GADGETSLIB

Statement: Redraw

Modes :

Syntax : Redraw Window#[,Id]

ReDraw will redisplay the specified gadget in the specified window. This command is mainly of use when a proportional gadget has been altered using SetHProp or SetVProp and needs to be redrawn, or when a string gadget has been cleared using ClearString, and, likewise, needs to be redrawn.

If you use this command without an Id parameter, all gadgets attached to the window will be refreshed.

1.17 GADGETSLIB

Statement: Gap1

Modes :

Syntax : Gap1 *Gap2

1.18 GADGETSLIB

Statement: Gap2

Modes :

Syntax : Gap2

1.19 GADGETSLIB

Statement: Toggle

Modes :

Syntax : Toggle GadgetList#,Id [,On|Off]

The Toggle command in the gadget library has been extended so it will actually toggle a gadgets status if the no On|Off parameter is missing.

1.20 GADGETSLIB

Statement: Gap3

Modes :

Syntax : Gap3 *GadgetBorder

The GadgetBorder command may be used to draw a rectangular border into the currently used window.

Proportional gadgets and shape gadgets do not have borders automatically created for them. The GadgetBorder command may be used, once a window is opened, to render borders around these gadgets.

X,Y, Width and Height refer to the position of the gadget a border is required around. GadgetBorder will automatically insert spaces between the gadget and the border. The Borders command may be used to alter the amount of spacing.

Of course, GadgetBorder may be used to draw a border around any arbitrary area, regardless of whether or not that area contains a gadget.

1.21 GADGETSLIB

Statement: GadgetBorder

Modes :

Syntax : GadgetBorder X,Y,Width,Height

The GadgetBorder command may be used to draw a rectangular border into the currently used window.

Proportional gadgets and shape gadgets do not have borders automatically created for them. The GadgetBorder command may be used, once a window is opened, to render borders around these gadgets.

X,Y, Width and Height refer to the position of the gadget a border is required around. GadgetBorder will automatically insert spaces between the gadget and the border. The Borders command may be used to alter the amount of spacing.

Of course, GadgetBorder may be used to draw a border around any arbitrary area, regardless of whether or not that area contains a gadget.

1.22 GADGETSLIB

Statement: Borders

Modes :

Syntax : Borders [On|Off]|[Width,Height]

Borders serves 2 purposes. First, Borders may be used to turn on or off the automatic creation of borders around text and string gadgets. Borders are created when either a TextGadget or StringGadget command is executed. If you wish to disable this, Borders Off should be executed before the appropriate TextGadget or StringGadget command.

Borders may also be used to specify the spacing between a gadget and it's border, Width referring to the left/right spacing, and Height to the above/below spacing.

1.23 GADGETSLIB

Statement: ActivateString

Modes :

Syntax : ActivateString Window#,Id

ActivateString may be used to 'automatically' activate a string gadget. This is identical to the program user having clicked in the string gadget themselves, as the string gadget's cursor will appear, and further keystrokes will be sent to the string gadget.

It is often nice of a program to activate important string gadgets, as it saves the user the hassle of having to reach for the mouse before the keyboard.

1.24 GADGETSLIB

Statement: ResetString

Modes :

Syntax : ResetString GadgetList#,Id

ResetString allows you to 'reset' a string gadget. This will cause the string gadget's cursor position to be set to the leftmost position.

1.25 GADGETSLIB

Function: StringText\$

Modes :

Syntax : StringText\$ (GadgetList#,Id)

The Stringtext\$ function allows you to determine the current contents

of a string gadget. `StringText$` will return a string of characters representing the string gadgets contents.

1.26 GADGETSLIB

Statement: `ClearString`

Modes :

Syntax : `ClearString GadgetList#,Id`

`ClearString` may be used to clear, or erase, the text in the specified string gadget. The cursor position will also be moved to the leftmost position in the string gadget.

If a string gadget is cleared while it is displayed in a window, the text will not be erased from the actual display. To do this, `ReDraw` must be executed.

1.27 GADGETSLIB

Statement: `GadgetList`

Modes :

Syntax : `GadgetList List of Gadgets`

1.28 GADGETSLIB

Statement: `GadgetPens`

Modes :

Syntax : `GadgetPens Foreground Colour[,Background Colour]`

`GadgetPens` determines the text colours used when text gadgets are created using the `TextGadget` command. The default values used for gadget colours are a foreground colour of 1, and a background colour of 0.

1.29 GADGETSLIB

Statement: `BorderPens`

Modes :

Syntax : BorderPens Highlight Colour,Shadow Colour

BorderPens allows you to control the colours used when gadget borders are created. Gadget borders may be created by the TextGadget, StringGadget and GadgetBorder commands.

HighLight Colour refers to the colour of the top and left edges of the border, while Shadow Colour refers to the right and bottom edges.

The default value for HighLight Colour is 1. The default value for Shadow Colour is 2.

1.30 GADGETSLIB

Statement: GadgetJam

Modes :

Syntax : GadgetJam Jammode

GadgetJam allows you to determine the text rendering method used when gadgets are created using the TextGadget command. Please refer to the WJam command in the windows chapter for a full description of jam modes available.

1.31 GADGETSLIB

Statement: SelectMode

Modes :

Syntax : SelectMode 1=Box, 0=Inverse

SelectMode is used to predefine how gadget rendering will show a gadget selection, modes are 1 for box and 0 for inverse. Use prior to creation of gadgets.

1.32 GADGETSLIB

Statement: SetString

Modes :

Syntax : SetString GadgetList#,Id,String\$

SetString may be used to initialize the contents of a string gadget created with the StringGadget command. If the string gadget specified by GadgetList# and Id is already displayed, you will also need to execute ReDraw to display the change.

1.33 GADGETSLIB

Statement: ButtonGroup

Modes :

Syntax : ButtonGroup Group

ButtonGroup allows you to determine which 'group' a number of button type gadgets belong to. Following the execution of ButtonGroup, any button gadgets created will be identified as belonging to the specified group. The upshot of all this is that button gadgets are only mutually exclusive to other button gadgets within the same group.

'Group' must be a positive number greater than 0. Any button gadgets created before a 'ButtonGroup' command is executed will belong to group 1.

1.34 GADGETSLIB

Function: GadgetStatus

Modes :

Syntax : GadgetStatus (GadgetList#,Id)

GadgetStatus may be used to determine the status of the specified gadget. In the case of 'toggle' type gadget, GadgetStatus will return true (-1) if the gadget is currently on, or false (0) if the gadget is currently off.

In the case of a cycling text gadget, GadgetStatus will return a value of 1 or greater representing the currently displayed text within the gadget.

1.35 GADGETSLIB

Function: ButtonId

Modes :

Syntax : ButtonId (GadgetList#,ButtonGroup)

ButtonId may be used to determine which gadget within a group of button type gadgets is currently selected. The value returned will be the GadgetId of the button gadget currently selected.

1.36 GADGETSLIB

Function: Enable

Modes :

Syntax : Enable (GadgetList#,Id)

A gadget when disabled is covered by a "mesh" and can not be accessed by the user. The commands Enable and Disable allow the programmer to access this feature of Intuition.

1.37 GADGETSLIB

Function: Disable

Modes :

Syntax : Disable (GadgetList#,Id)

A gadget when disabled is covered by a "mesh" and can not be accessed by the user. The commands Enable and Disable allow the programmer to access this feature of Intuition.

1.38 GADGETSLIB

Function: SetGadgetStatus

Modes :

Syntax : SetGadgetStatus (GadgetList#,Id,Value)

SetGadgetStatus is used to set a cycling text gadget to a particular value, once set ReDraw should be used to refresh the gadget to reflect it's new value.

NEW GADGETS EXAMPLE:

```

;
; new gadget types
;
WBStartup:FindScreen 0 ;open on workbench
TextGadget 0,32,14,0,0,"CYCLE 1|CYCLE 2|CYCLE 3"

ButtonGroup 1 ;first group of radio buttons follows
For i=1 To 5
  TextGadget 0,32,14+i*14,512,i,"CHANNEL #"+Str$(i)
Next

ButtonGroup 2 ;second group of radio buttons follows
For i=6 To 10
  TextGadget 0,32,14+i*14,512,i,"BAND #"+Str$(i)
Next

```

```
Window 0,20,20,160,180,$1008,"GADGET TEST",1,2,0
```

```
Repeat          ;wait until close window gadget hit  
  ev.l=WaitEvent  
Until ev=$200
```

1.39 GADGETSLIB

GADGETSLIB	
Overview	Command Index
ActivateString	
ArrowGadget	
BorderPens	
Borders	
ButtonGroup	
ButtonId	
ClearString	
Disable	
Enable	
GadgetJam	
GadgetList	
GadgetPens	
GadgetStatus	
Gap1	
Gap3	
GetPropCurrent	
HPropBody	
HPropPot	
MoveProp	

PropGadget

Redraw

ResetString

SelectMode

SetGadgetStatus

SetHProp

SetPropInfo

SetString

SetVProp

ShapeGadget

StringGadget

StringText\$

TextGadget

Toggle

VPropBody
