16Bit Pointer wit	n max 256x256 resolu	ution			Elements					
XML Name	box	label	button	gfx	list	checkbox	radiobutton	subwindow	window	shortcut
Byte	Box	Label	Button	GFX	List	Checkbox	Radiobutton	SubWindow	window	Shortcut
	1 1	2	3	4	5	6	7	8	9	10
	2 X pos	X pos	X pos	X pos	X pos	X pos	X pos	X pos	FocusPrevKey	ShortCutKey
	3 Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	FocusNextKey	Action NumberL
	4 X size	Options	X size	X size	FocusEnterKey	Action NumberH				
	5 Y size	Text PointerL	Y size	Y size		Window JumpL				
	6 Options	Text PointerH	Options	Options	Options	Options	Options	FocusPrevKey		Window JumpH
	7 Action NumberL	Fonts	Action NumberL	FocusNextKey						
	8 Action NumberH		Action NumberH	FocusEnterKey						
	9 Window JumpL		Window JumpL							
	10 Window JumpH		Window JumpH							
	11 Color		Text PointerL	Gfx PointerL	Text PointerL	Text PointerL	Text PointerL			
	12		Text PointerH	Gfx PointerH	Text PointerH	Text PointerH	Text PointerH			
	13		Fonts		Fonts	Fonts	Fonts			
	14				ListNumber	CheckboxNumber	RadioButtonNumber			
	15				DownKey					
	16				UpKey					
	17				PageDownKey					
	18				PageUpKey					
	19									
	20									
	21									
	22									
	23									
	24									
Relevant Options	: Focusable	Storage Method	Focusable	Focusable	Focusable	Focusable	Focusable			
•			Rectangle	Rectangle			Rectangle=0			
			Storage Method	Compressed	Ĭ	Storage Method	Storage Method			
				Storage Method		1				

Options: 1: Bit: Focusable, 2. Bit: Rectangle, 3: Bit: Compressed, 4: Bit: Storage Method

Focusable: 0: No, 1:Yes

Window JumpL Window JumpH Text/GFX PointerL

Fonts

Text/GFX PointerH

Fonts: Low4Bit: Font without focus, High4Bit: Font with focus, a label uses all 8 bit for a single font

Storage Method: 0: Within Menu Data, 1: In pointer Array

RadioButtonNumber: Low4Bit: Index in Table, High4Bit: Value within the Group

Required order of parameters, unused may be omitted: If the object has an Action Number and screen jump, they all must start at the same offset (except for the shortcut). The offset is currently +6 bytes from the object id X pos Then the options must start at the same address too. Currently +5 bytes from the object id Y pos XY posH

X size Y size Data format for GFX: Converting everything to one long array, beginning at the left top position, processing a line (and not column) first XY sizeH Uncompressed: One byte each 8 pixel, MSB is leftmost pixel, LSB is rightmost pixel Compressed: MSB codes the color, reaming 7 bits say how often the color repeats Options ShortCutKey Action NumberL Action NumberH

Data format for text: Simple ASCII String must end with a \0 byte

A Window Switch code of 0xffff (0xffffff in 24 Bit mode) has the special meaning for returning from an SubWindow to a previous Window and restores the focus

The first object must start at address 1 in the binary data and must be a windows or global shortcut.

16Bit

Color	
List/Checkbox/Radio	Button Number
DownKey	
UpKey	
PageDownKey	
PageUpKey	
FocusPrevKey	
FocusNextKey	
FocusEnterKey	

The byte at address 0 is not read and currently stores a version information about the binary encoding: MenuDesigner: Version 1.0->0; Version 1.1->2 (allow global shortcuts, change SubWindow Return storage)

If an object should not perform a window jump, all address bytes have to be set to zero

After a window or subwindow, the objects for the window have to follow, the order of the objects determines the drawing and tab order The objects for the window end, if a next window or subwindow or 0 byte as next object is found

All shortcuts stored before the first window are handled as global shortcuts

24Bit Pointer with max 256x256 resolution				Elements						
XML Name	box	label	button	gfx	list	checkbox	radiobutton	subwindow	window	shortcut
Byte	Box	Label	Button	GFX	List	Checkbox	Radiobutton	SubWindow	Screen	Shortcut
1	1 1	2	3	4	5	6	7	8	9	10
2	X pos	X pos	FocusPrevKey	ShortCutKey						
3	BY pos	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	FocusNextKey	Action NumberL
	X size	Options	X size	X size	FocusEnterKey	Action NumberH				
5	Y size	Text PointerL	Y size	Y size		Window JumpL				
6	Options	Text PointerH	Options	Options	Options	Options	Options	FocusPrevKey		Window JumpH
7	Action NumberL	Text PointerHx	Action NumberL	FocusNextKey		Window JumpHx				
8	Action NumberH	Fonts		Action NumberH	Action NumberH	Action NumberH	Action NumberH	FocusEnterKey		
S	Window JumpL		Window JumpL							
10	Window JumpH		Window JumpH							
11	Window JumpHx		Window JumpHx							
12	Color		Text PointerL	Gfx PointerL	Text PointerL	Text PointerL	Text PointerL			
13	3		Text PointerH	Gfx PointerH	Text PointerH	Text PointerH	Text PointerH			
14	1		Text PointerHx	Gfx PointerHx	Text PointerHx	Text PointerHx	Text PointerHx			
15	5		Fonts		Fonts	Fonts	Fonts			
16					ListNumber	CheckboxNumber	RadioButtonNumber			
17	7				DownKey					
18	3				UpKey					
19					PageDownKey					
20					PageUpKey					
21										
22										
23	3									
24	1									

16BitL

16Bit Pointer with max 4096x4096 resolution (LARGESCREEN)					Elements					
XML Name	box	label	button	gfx	list	checkbox	radiobutton	subwindow	window	shortcut
Byte	Box	Label	Button	GFX	List	Checkbox	Radiobutton	SubWindow	window	Shortcut
1	1	2	3	4	5	6	7	8	9	10
2	X pos	X pos	X pos	X pos	X pos	X pos	X pos	X pos	FocusPrevKey	ShortCutKey
3	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	FocusNextKey	Action NumberL
4	XY posH	XY posH	XY posH	XY posH	XY posH	XY posH	XY posH	XY posH	FocusEnterKey	Action NumberH
5	X size	Options	X size	X size		Window JumpL				
6	Y size	Text PointerL	Y size	Y size		Window JumpH				
7	XY sizeH	Text PointerH	XY sizeH	XY sizeH						
8	Options	Fonts	Options	Options	Options	Options	Options	FocusPrevKey		
9	Action NumberL		Action NumberL	FocusNextKey						
10	Action NumberH		Action NumberH	FocusEnterKey						
11	Window JumpL		Window JumpL							
12	Window JumpH		Window JumpH							
13	Color		Text PointerL	Gfx PointerL	Text PointerL	Text PointerL	Text PointerL			
14			Text PointerH	Gfx PointerH	Text PointerH	Text PointerH	Text PointerH			
15			Fonts		Fonts	Fonts	Fonts			
16					ListNumber	CheckboxNumber	RadioButtonNumber			
17					DownKey					
18					UpKey					
19					PageDownKey					
20					PageUpKey					
21										
22										
23										
24										

If the object has an Action Number and screen jump, they all must start at the same offset (except for the shortcut). The offset is currently +8 bytes from the object id Then the options must start at the same address too. Currently +7 bytes from the object id XY posH and XY sizeH: low 4 bit are the high Y and the high 4 bit are the high X position bits

24BitL

24Bit Pointer with max 4096x4096 resolution (LARGESCREEN)					Elements					
XML Name	box	label	button	gfx	list	checkbox	radiobutton	subwindow	window	shortcut
Byte	Box	Label	Button	GFX	List	Checkbox	Radiobutton	SubWindow	Screen	Shortcut
	1 1	2	3	4	5	6	7	8	9	10
	2 X pos	X pos	X pos	X pos	X pos	X pos	X pos	X pos	FocusPrevKey	ShortCutKey
	3 Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	Y pos	FocusNextKey	Action NumberL
	4 XY posH	XY posH	XY posH	XY posH	XY posH	XY posH	XY posH	XY posH	FocusEnterKey	Action NumberH
	5 X size	Options	X size	X size	X size	X size	X size	X size		Window JumpL
	6 Y size	Text PointerL	Y size	Y size	Y size	Y size	Y size	Y size		Window JumpH
	7 XY sizeH	Text PointerH	XY sizeH	XY sizeH	XY sizeH	XY sizeH	XY sizeH	XY sizeH		Window JumpHx
	8 Options	Text PointerHx	Options	Options	Options	Options	Options	FocusPrevKey		
	9 Action NumberL	Fonts	Action Numbe	Action NumberL	Action NumberL	Action NumberL	Action NumberL	FocusNextKey		
1	10 Action NumberH		Action Numbe	Action NumberH	Action NumberH	Action NumberH	Action NumberH	FocusEnterKey		
1	11 Window JumpL			Window JumpL	Window JumpL	Window JumpL	Window JumpL			
1	12 Window JumpH			Window JumpH	Window JumpH	Window JumpH	Window JumpH			
1	13 Window JumpHx		Window Jump	Window JumpHx	Window JumpHx	Window JumpHx	Window JumpHx			
1	14 Color		Text PointerL	Gfx PointerL	Text PointerL	Text PointerL	Text PointerL			
1	15		Text PointerH	Gfx PointerH	Text PointerH	Text PointerH	Text PointerH			
1	16		Text PointerH	Gfx PointerHx	Text PointerHx	Text PointerHx	Text PointerHx			
	17		Fonts		Fonts	Fonts	Fonts			
1	18				ListNumber	CheckboxNumber	RadioButtonNumber			
	19				DownKey					
2	20				UpKey					
	21				PageDownKey					
	22				PageUpKey					
	23									
2	24									

If the object has an Action Number and screen jump, they all must start at the same offset (except for the shortcut). The offset is currently +8 bytes from the object id Then the options must start at the same address too. Currently +7 bytes from the object id