

ScrBuffer

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Chapter 1

ScrBuffer

1.1 ScrBuffer.guide

Filled Vector Module for AmigaE 3.0+

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Michael Zucchi
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This document describes the functions available for creating and working with Workbench 3.0+ double buffered screen routines. They provide a general purpose high level suite of routines for accessing these system routines that can be used for any double buffering system.

Functions currently available are:

```
sb_OpenScreen()
  to open a screen

sb_CloseScreen()
  to close a screen

sb_NextBuffer()
  waits for the next buffer to be displayed

sb_GetBitMap()
  gives hidden bitmap pointer

sb_GetScreen()
  gives base screen pointer
```

```
examples
  how to use it
```

Remember, use of this module requires that V39 libraries are present in the target system! Never use these functions without making sure this

is the case.

1.2 author

I'm another one of these poor students, but i live in Australia, not Europe!

Presently, i study 'from time to time' :-) in order to obtain a Computer Systems Engineering degree from the Univerity Of South Australia. Now less than 6 months to go (at last!)

Other than this and other AmigaE modules, i've coded a couple of demos for FRONTIER as the coder 'Zed', along with some small utilities, esp ZGif.

I can be contacted in the following ways:

Internet email:

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till the end of '94 at least - reliable

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if it works it works ...

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Michael Zucchi
PO BOX 824
Waikerie
South Australia 5330
slow, but very reliable

Michael Zucchi
110 Dunrobin Rd
Warradale
South Australia 5046
to my door - till i move (?)

1.3 sb_openscreen

scrbuffer.m/sb_OpenScreen
sb_OpenScreen

scrbuffer.m/ ↔

SYNTAX

buffered screen := sb_OpenScreen (tags, type)

PURPOSE

To open multibuffered screen. Also allocates at least 1 more buffer to 'multibuffer' and a message port to recieve notification

events.

INPUTS

tags list of tags as found in "intuition/screens" that describe the screen you wish to open. All the usual tags such as SA_WIDTH, SA_HEIGHT, SA_DEPTH etc are used.

type the type of buffered screen to open. Only use 0 for now, may be enhanced in future to add multi-buffering.

OUTPUTS

buffered screen

a pointer to the buffered screen, or 0 if the screen or associate memory could not be allocated. All fields of this structure are PRIVATE.

SEE ALSO

```
sb_CloseScreen()
,
sb_NextBuffer()
,
sb_GetBitMap()
,
sb_GetScreen()
```

1.4 sb_closescreen

```
scrbuffer.m/sb_CloseScreen
sb_CloseScreen
```

```
scrbuffer.m/ ↔
```

SYNTAX

```
sb_CloseScreen ( buffered screen )
```

PURPOSE

Closes a buffered screen. All associated resources (buffers, message ports etc) are returned to the system.

INPUTS

screen a buffered screen handle, as returned from sb_OpenScreen()
NOT a standard Amiga screen!

SEE ALSO

```
sb_OpenScreen()
```

1.5 sb_nextbuffer

scrbuffer.m/sb_NextBuffer
sb_NextBuffer

scrbuffer.m/ ↔

SYNTAX

```
bitmap = sb_NextBuffer( buffered screen )
```

PURPOSE

Ask the operating system to change the bitmap of the screen associated with the double buffered screen, and wait for it to happen so that the other screen is hidden, ready for rendering. It does this by calling ChangeScreenBuffer() from the V39 Intuition library, then waiting for the reply message.

INPUTS

screen a buffered screen handle, as returned from
sb_OpenScreen()

OUTPUTS

bitmap a standard Amiga bitmap, that represents the currently HIDDEN display area. This will usually need to be cleared and can then be rendered into.

SEE ALSO

```
sb_OpenScreen()
,
sb_NextBuffer()
,
sb_GetBitMap()
,
sb_GetScreen()
```

1.6 sb_getbitmap

scrbuffer.m/sb_GetBitMap
sb_GetBitMap

scrbuffer.m/ ↔

SYNTAX

```
bitmap = sb_GetBitMap( buffered screen )
```

PURPOSE

Returns the currently hidden bitmap. This will be identical to that returned by

```
sb_NextBuffer()
```

.

INPUTS

screen a buffered screen handle, as returned from
sb_OpenScreen()

OUTPUTS

bitmap a standard amiga bitmap, that represents the currently HIDDEN

display area.

SEE ALSO

```
sb_NextBuffer()  
,  
sb_OpenScreen()  
,  
sb_GetBitMap()  
,  
sb_GetScreen()
```

1.7 sb_getscreen

```
scrbuffer.m/sb_GetScreen  
sb_GetScreen
```

scrbuffer.m/ ↔

SYNTAX

```
screen = sb_GetScreen( buffered screen )
```

PURPOSE

Returns the Amiga screen associated with the double buffered screen. This is to enable windows and other standard intuition operations to be performed on the screen.

INPUTS

```
screen a buffered screen handle, as returned from  
sb_OpenScreen()
```

OUTPUTS

```
screen a standard Amiga Screen
```

SEE ALSO

```
sb_NextBuffer()  
,  
sb_OpenScreen()  
,  
sb_GetBitMap()
```

1.8 Information about the examples

Only 1 example has been written so far.

TheBOX

A simple example that shows how to open a simple double buffered screen, and render into the offscreen bitmap using the system functions. It also shows how a window can be opened on the screen to get input events.
