

QuickTime supports real time grabbing of different media types via channel components. Video and Sound are the most popular sequence grabbers channels. Music was added later. The latest addition is Text.

OR:

Capturing video and sound with QuickTime is so easy that everyone is doing it. When these vast libraries of digital movie are created, sometime information in the original is lost. The closed-captioned text embedded in the video is lost, until now. A new sequence grabber channel is now available. Along with video, sound, and music channels, even more information can be put into digital movies. This allows for fast searching and cataloging of media.

Just as the video grabber calls digitizer components that have been written for specific hardware, the text grabber calls texturizer(how's that for a name?) components that supply text. We have written a texturizer component that works with an Apple TV Tuner card. It converts the closed-captioned data into text data for a text track.

These are the new calls specific to the text channel.

SGSetFontName

To set the font used to display the text. Pascal style string contains the font name to be used.

```
extern pascal ComponentResult SGSetFontName(SGChannel c, StringPtr pstr)
```

SGSetFontSize

Wonder what this does?

```
extern pascal ComponentResult SGSetFontSize(SGChannel c, short fontSize)
```

SGSetTextColor

This sets the text Color.

```
extern pascal ComponentResult SGSetTextColor(SGChannel c, RGBColor
*theColor)
```

SGSetTextBackColor

This sets the background color of the text track.

```
extern pascal ComponentResult SGSetTextBackColor(SGChannel c, RGBColor
*theColor)
```

SGSetJustification

With this call, you can change the alignment of the text. The recognized values are the same as in "TextEdit.h"

```
teFlushDefault = 0,
/*flush according to the line direction */
teCenter = 1,
/*center justify (word alignment) */
```

```

teFlushRight          = -1,
/*flush right for all scripts */
teFlushLeft          = -2,
/*flush left for all scripts */

```

```

extern pascal ComponentResult SGSetJustification(SGChannel c, short
just)

```

SGGetTextRetToSpaceValue

When capturing text from closed-caption television source the text is broken in up to four lines of text of up to 32 characters. It is sometimes desirable to have the returns within a sample to be replaced with a space character. Use this call to check if the returns are being replaced or not. If true, the returns are being replaced; if false, they are not.

```

extern pascal ComponentResult SGGetTextRetToSpaceValue(SGChannel c,
short *rettospace)

```

SGSetTextRetToSpaceValue

When capturing text from closed-caption television source the text is broken in up to four lines of text of up to 32 characters. It is sometimes desirable to have the returns within a sample to be replaced with a space character. Use this call to set whether the returns are being replaced or not. If true, the returns will be replaced; if false, they will not.

```

extern pascal ComponentResult SGSetTextRetToSpaceValue(SGChannel c,
short rettospace)

```

These are the Sequence Grabber calls that are supported by the text channel Supported

```

extern pascal ComponentResult SGSetGWorld(SeqGrabComponent s, CGrafPtr gp, GDHandle gd)
extern pascal ComponentResult SGNewChannel(SeqGrabComponent s, OSType channelType, SGChannel c)
extern pascal ComponentResult SGStartPreview(SeqGrabComponent s)
extern pascal ComponentResult SGStartRecord(SeqGrabComponent s)
extern pascal ComponentResult SGIIdle(SeqGrabComponent s)
extern pascal ComponentResult SGStop(SeqGrabComponent s)
extern pascal ComponentResult SGPause(SeqGrabComponent s, Byte pause)
extern pascal ComponentResult SGPrepare(SeqGrabComponent s, Boolean prepareForPreview)
extern pascal ComponentResult SGRelease(SeqGrabComponent s)
extern pascal ComponentResult SGGetChannelDeviceList(SGChannel c, long selectionFlags,
extern pascal ComponentResult SGUpdate(SeqGrabComponent s, RgnHandle updateRgn)
(SGUpdate is really just stubbed out for now)

```

```

//calls from Channel to seqGrab

```

```

extern pascal ComponentResult SGSetChannelUsage(SGChannel c, long usage)
extern pascal ComponentResult SGGetChannelUsage(SGChannel c, long *usage)
extern pascal ComponentResult SGSetChannelBounds(SGChannel c, const Rect *bounds)
extern pascal ComponentResult SGGetChannelBounds(SGChannel c, Rect *bounds)
extern pascal ComponentResult SGGetChannelInfo(SGChannel c, long *channelInfo)
extern pascal ComponentResult SGSetChannelClip(SGChannel c, RgnHandle theClip)
extern pascal ComponentResult SGGetChannelClip(SGChannel c, RgnHandle *theClip)
extern pascal ComponentResult SGGetChannelSampleDescription(SGChannel c, Handle sampleDesc)

```

```

extern pascal ComponentResult SGSetChannel Device(SGChannel c, StringPtr name)
extern pascal ComponentResult SGSetChannel Matrix(SGChannel c, const MatrixRecord *m)
extern pascal ComponentResult SGGetChannel Matrix(SGChannel c, MatrixRecord *m)
extern pascal ComponentResult SGGetChannel TimeScale(SGChannel c, TimeScale *scale)

//calls from seqGrab to Channel
extern pascal ComponentResult SGInitChannel(SGChannel c, SeqGrabComponent owner)
extern pascal ComponentResult SGWriteSamples(SGChannel c, Movie m, AliasHandle theFile)
extern pascal ComponentResult SGGetDataRate(SGChannel c, long *bytesPerSecond)

```

Not Supported but maybe should be????

```

extern pascal ComponentResult SGGetGWorld(SeqGrabComponent s, CGrafPtr *gp, GDHandle *g)
extern pascal ComponentResult SGDisposeChannel(SeqGrabComponent s, SGChannel c)
extern pascal ComponentResult SGGrabPict(SeqGrabComponent s, PictHandle *p, const Rect *grabPictFlags)
extern pascal ComponentResult SGSetSettings(SeqGrabComponent s, UserData ud, long flags)
extern pascal ComponentResult SGGetSettings(SeqGrabComponent s, UserData *ud, long flags)
extern pascal ComponentResult SGSetChannelRefCon(SGChannel c, long refCon)

```

What about these???

```

extern pascal ComponentResult SGSettingsDialog(SeqGrabComponent s, SGChannel c, short n
SGModalFilterUPP proc, long procRefNum)
extern pascal ComponentResult SGGetAlignmentProc(SeqGrabComponent s, ICMAAlignmentProcRe
extern pascal ComponentResult SGSetChannelSettings(SeqGrabComponent s, SGChannel c, Use
extern pascal ComponentResult SGGetChannelSettings(SeqGrabComponent s, SGChannel c, Use
extern pascal ComponentResult SGAlignChannelRect(SGChannel c, Rect *r)

```

//Dorky dialog panel calls

Supported (right side)

```

extern pascal ComponentResult SGPanelGetDitl(SeqGrabComponent s, Handle *ditl)
extern pascal ComponentResult SGPanelInstall(SeqGrabComponent s, SGChannel c, DialogPtr
extern pascal ComponentResult SGPanelEvent(SeqGrabComponent s, SGChannel c, DialogPtr d
short *itemHit, Boolean *handled)
extern pascal ComponentResult SGPanelRemove(SeqGrabComponent s, SGChannel c, DialogPtr
extern pascal ComponentResult SGPanelGetSettings(SeqGrabComponent s, SGChannel c, UserD
extern pascal ComponentResult SGPanelSetSettings(SeqGrabComponent s, SGChannel c, UserD

```

Not Supported by Text Channel (right side)

```

extern pascal ComponentResult SGPanelGetTitle(SeqGrabComponent s, Str255 title)
extern pascal ComponentResult SGPanelCanRun(SeqGrabComponent s, SGChannel c)
extern pascal ComponentResult SGPanelItem(SeqGrabComponent s, SGChannel c, DialogPtr d,
extern pascal ComponentResult SGPanelSetGrabber(SeqGrabComponent s, SeqGrabComponent sg
extern pascal ComponentResult SGPanelSetResFile(SeqGrabComponent s, short resRef)
extern pascal ComponentResult SGPanelValidateInput(SeqGrabComponent s, Boolean *ok)
extern pascal ComponentResult SGPanelSetEventFilter(SeqGrabComponent s, SGModalFilterUP

```

Supported by Text Panel (Left Side)

```

extern pascal ComponentResult SGPanelGetDitl(SeqGrabComponent s, Handle *ditl)
extern pascal ComponentResult SGPanelInstall(SeqGrabComponent s, SGChannel c, DialogPtr
extern pascal ComponentResult SGPanelEvent(SeqGrabComponent s, SGChannel c, DialogPtr d
short *itemHit, Boolean *handled)
extern pascal ComponentResult SGPanelRemove(SeqGrabComponent s, SGChannel c, DialogPtr
extern pascal ComponentResult SGPanelGetSettings(SeqGrabComponent s, SGChannel c, UserD

```

```
extern pascal ComponentResult SGPanelSetSettings(SeqGrabComponent s, SGChannel c, UserD  
extern pascal ComponentResult SGPanelItem(SeqGrabComponent s, SGChannel c, DialogPtr d,
```