SPB Page 1

SPB structure

#include <Sound.h>

typedef struct SPB {		<u>Size</u>	<u>Offset</u>	<u>Description</u>
<u>long</u>	inRefNum;	4	0	reference number of input device
unsigned long	count;	4	4	number of bytes to record
unsigned long	milliseconds;	4	8	number of milliseconds to record
unsigned long	bufferLength;	4	12	length of buffer to record into
<u>Ptr</u>	buffer	4	16	pointer to buffer to record into
<u>ProcPtr</u>	completionRoutine	; 4	20	pointer to a completion routine
<u>ProcPtr</u>	interruptRoutine;	4	24	pointer to an interrupt routine
<u>long</u>	userLong;	4	28	for application's use
<u>OSErr</u>	error	2	32	error returned after recording
<u>long</u>	unused1	4	34	reserved
} SPB ;		38		

typedef SPB *SPBPtr;

Field descriptions

inRefNum The reference number of the sound input device (as

received from **SPBOpenDevice**) from which the

recording is to occur.

count On input, the number of bytes to record. On output, the

number of bytes actually recorded. If this field

specifies a longer recording time than the milliseconds field, then the milliseconds field is ignored on input.

milliseconds On input, the number of milliseconds to record. On

output, the number of milliseconds actually recorded. If this field specifies a longer recording time than the count field, then the count field is ignored on input.

bufferLength The length of the buffer into which recorded sound data

is placed. The recording time specified by the count or milliseconds field is truncated to fit into this length, if

necessary.

bufferPtr A pointer to the buffer into which recorded data is

placed. If this field is NULL, then the count,

milliseconds, and bufferLength fields are ignored and the

recording will continue indefinitely until

SPBStopRecording is called. However, the data is not stored anywhere, so setting this field to NULL is useful only if you want to do something in your

interrupt routine but do not want to save the recorded

sound.

completionRoutine A pointer to a completion routine that is called when

the recording terminates as a result of your calling **SPBStopRecording** or when the limit specified by

the count or milliseconds field is reached. The

SPB Page 2

completion routine executes only if **SPBRecord** is called asynchronously and therefore is called at

interrupt time.

interruptRoutine A pointer to a routine that is called by asynchronous

recording devices when their internal buffers are full.

userLong A long integer available for the application's own use.

You can use this field, for instance, to pass a handle to an application-defined structure to the completion

routine or to the interrupt routine.

error A code describing any errors that occur during the

recording. If the recording terminates without an error, this field contains <u>noErr</u>. If any error occurs during the recording, this field contains a value of type <u>OSErr</u>. If the recording is terminated by a call to <u>SPBStopRecording</u>, this field contains the value <u>abortErr</u>. You can poll this field while recording asynchronously to determine if any errors have

occurred.

unused1 Reserved for use by Apple. You should always

initialize this field to 0.