CommonChunk structure

#include <AIFF.h>

```
typedef struct CommonChunk {    Size   Offset   Description
    ID          ckID;            4       0      'COMM'
    long        ckSize;          4       4      size of chunk data
    short       numChannels;     2       8      number of channels
    long        numSampleFrames; 4      10      number of sample frames
    short       sampleSize;      2      14      number of bits per sample
    Extended    sampleRate;     12      16      number of frames per second
} CommonChunk;                  28
```

typedef CommonChunk ***CommonChunkPtr**;

The fields that exist in the **CommonChunk** and the **ExtCommonChunk** have the following meanings:

Field descriptions

ckID — The ID of this chunk. For a **CommonChunk**, this ID is 'COMM'.

ckSize — The size of the data portion of this chunk. In AIFF files, this field is always 18 in the **CommonChunk** because the 8 bytes used by the *ckID* and *ckSize* fields are not included. In AIFF-C files, this size is 22 plus the number of bytes in the *compressionName* string.

numChannels — The number of audio channels contained in the sampled sound. A value of 1 indicates monophonic sound; 2 indicates stereo sound; 4 indicates four-channel sound, etc. You can use any number of audio channels . The actual sound data is stored elsewhere, in the **Sound Data Chunk**.

numSampleFrames — The number of sample frames in the **Sound Data Chunk**. Note that this field contains the number of sample frames, not the number of bytes of data and not the number of sample points. For noncompressed sound data, the total number of sample points in the file is *numChannels * numSampleFrames*. (See the **Sound Data Chunk** for a definition of a sample frame.)

sampleSize — The number of bits in each sample point of noncompressed sound data. The sampleSize field can contain any integer from 1 to 32. For compressed sound data, this field indicates the number of bits per sample in the original sound data, before compression.

sampleRate — The sample rate at which the sound is to be played back, in sample frames per second.

An AIFF-C Common Chunk includes two fields that describe the type of compression (if any) used on the audio data:

Field descriptions

compressionType — The ID of the compression algorithm, if any, used on the sound data.

compressionName — A human-readable name for the compression algorithm ID specified in the compressionType field. This string is useful when putting up alert boxes (perhaps because a necessary decompression routine is missing). Remember to pad the end of this array with a byte having the value 0 if the length of this array is not an even number (but do not include the pad byte in the count).

Here are the currently available compression IDs and their associated compression names:

compressionType	compressionName	Description
'NONE'	'not compressed'	Noncompressed samples
'ACE2'	'ACE 2-to-1'	IIGS 2-to-1 compressed
'ACE8'	'ACE 8-to-3'	IIGS 8-to-3 compressed
'MAC3'	'MACE 3-to-1'	Macintosh 3-to-1 compressed
'MAC6'	'MACE 6-to-1'	Macintosh 6-to-1 compressed

You can define your own compression types, but you should register them with Apple.