

Apple II File Type Notes



Developer Technical Support

File Type: **\$D8 (216)**
Auxiliary Type: **\$8001**

Full Name: HyperStudio Sampled Sound File
Short Name: HyperStudio sound

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Files of this type and auxiliary type contain sampled sounds used by the HyperStudio™ multimedia package.

HyperStudio is a complete hypermedia authoring system, including sound hardware, sound and graphics tools that lets you create your own hypermedia applications.

For more information on HyperStudio, contact:

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File Structure

HyperStudio sound files contain sampled sound data prefaced by a special HyperStudio header. The header contains information about the file and the sound, including sampling and compression information and version numbers.

The File Format

Each HyperStudio file begins with this header information.

| | | | |
|-------------|--------|----------------|---|
| HFileID | (+000) | 4 Bytes | The ASCII characters "SSHS" (\$53 \$53 \$48 \$53). This identifies the file as a HyperStudio sound. |
| HDataOffset | (+004) | Long | Offset to the sound data from this field. For this version of the HyperStudio sound format, this value is always 56 (\$38). |

| | | | |
|-----------|--------|----------------|--|
| HVersID | (+008) | 4 Bytes | The version of HyperStudio that created this file. The current version is represented by the four ASCII characters "RWP" (\$52 \$57 \$50 \$20). |
| HDataID | (+012) | 4 Bytes | The ASCII characters "SSDK" (\$53 \$53 \$44 \$4B), identifying the creator of the data. Other applications wishing distinct creator IDs should contact Roger Wagner Publishing. |
| HLength2 | (+016) | Word | Sound sample length of channel one in 256-byte pages. |
| HPbRate2 | (+018) | Word | Playback rate for channel one. The value (HPbRate2+40) is the <code>freqOffset</code> for the <code>FFstartSound</code> toolbox call. (HPbRate2+40) * 51.40625 is the sample's frequency in Hertz. |
| HVolume2 | (+020) | Word | Volume for channel one (0-15). |
| HEcho2 | (+022) | Word | Echo value for channel one (0-127). |
| HLength | (+024) | Word | Sound sample length of channel zero in 256-byte pages. All other channels should have the same length. |
| HAce | (+026) | Word | Bits 0 - 13 of this word contain the ACE <code>nBlks</code> parameter (the number of 512-byte blocks to compress or expand). Bits 14 and 15 indicate the type of ACE compression used: %00xxxxxxxxxxxxxxxxxxxx - no compression %01xxxxxxxxxxxxxxxxxxxx - ACE method 1 (2:1) %10xxxxxxxxxxxxxxxxxxxx - ACE method 2 (8:3) %11xxxxxxxxxxxxxxxxxxxx - reserved |
| HPbRate | (+028) | Word | Playback rate for channel zero. The value (HPbRate+40) is the <code>freqOffset</code> for the <code>FFstartSound</code> toolbox call. (HPbRate+40) * 51.40625 is the sample's frequency in Hertz. |
| HVolume | (+030) | Word | Volume for channel zero (0-15). |
| HStereo | (+032) | Word | Number of channels for this sound file (0 = monophonic, 1 = stereo). |
| HEcho | (+034) | Word | Echo value for channel zero (0-127). |
| HReserved | (+036) | Word | Reserved for future use; set to zero. |
| HRepeat | (+038) | Word | Repeat count for both channels. The maximum value is 20, which indicates the sound is to repeat continuously. |
| HOffset1 | (+040) | Long | Offset to the sampled data for channel zero. This should be the value (64+(HLength*256)). |
| HExtra | (+044) | Long | Reserved for future use, set to zero. |
| HFileName | (+048) | String | If the name of this file is 16 characters or less, you may optionally place it here as a String . If you do not place the file name here, fill these 16 bytes with zeroes. |
| Data | (+064) | Bytes | The start of the sampled sound data. |

Further Reference

- *Apple IIGS Toolbox Reference, Volumes 2 & 3*

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