Tagging AVI Files manually

For files less than 2GB, use the abcAVI tag editor (http://abcavi.kibi.ru/download.htm). It rejects files over 2GB, so you have to tag them manually. There's a ton of tags – this tutorial shows how to add Title, Year, and Genre.

Note: In Windows 7, you can view many common tags in Detail View in Windows Explorer. In previous versions of Windows, or to view all metadata tags that have been added to a file, use WinAmp's "View File Info" feature.

Note: You have to edit the file with a hex editor in Overwrite mode. I have found HxD (http://mh-nexus.de/en/hxd/) to be an excellent choice because it does not load the entire file into memory.

Note: Multiple-byte integers are in 'little-endian' format – in other words, the smallest byte comes first (e.g. decimal 255 is FF 00 00 00; 256 is 00 01 00 00).

1. Find the last "JUNK" in the file header (there may be more than one "JUNK" so find the last one before the "LIST....movi" label) and note the 4-byte length (e.g. 8E 05 00 00)

2. Begin with "LIST" followed by the tag's 4-byte length (to be determined – see example below, in yellow), followed by "INFO" (This defines what kind of LIST it is.)

3. Code for Title is "INAM" followed by the 4-byte length of the title field.

4. Enter the Title followed by one or two zero bytes (fields must be an even number of bytes in length, and must end with a zero byte).

5. Code for Creation Date is "ICRD" followed by the 4-byte length of the date field.

6. Since this shows up in the "Year" field in Windows, it should be just a 4-digit year followed by two zero bytes, and the length would be 06 00 00 00 – if you enter a full date in mm/dd/yyyy format, it won't display in Windows.

7. Code for Genre is "IGNR" followed by the 4-byte length of the genre field.

8. Enter the Genre followed by one or two zero bytes (fields must be an even number of bytes in length).

9. Re-enter the word "JUNK" followed by the new length. The length is the difference between the OLD location of the "J" and the NEW location of the "J", and deducted from the OLD length. Alternately, you can find the new length by counting the padding space up to the next "LIST" chunk. For instance, in a good editor, select the padding chunk (shown in grey in the old stream below), and the size will be shown in the status bar. It will probably be shown as "big-endian" (536) so you'll have to flip it over to "little-endian" (36 05 00 00) to use it.

10. **Special note:** The length of the header is after the first "LIST" in the file. It must be the length from the beginning of the header (should begin with the label "hdrl") up to the beginning of the metadata tag (the beginning of the "LIST" you entered here). Depending on the program that created the AVI file, you may need to modify the length of the header in order for the metadata to be recognized. If you happen to get an AVI that doesn't leave you a JUNK chunk to use for your metadata, you would have to insert the metadata immediately before the "LIST....movi" label, and you would need to modify the file length (the 4 bytes following the "RIFF" at the beginning of the file). It is recommended to always make a backup copy when editing. The HxD editor creates a backup copy by default when you hit Save.

Examples: In an AVI created by avi.NET, the header length is always 56 02 00 00 and the "JUNK" you would be using is at address 0000026A (shown below) so it's already excluded, and you don't need to modify the header. However, if you use AVIDemux, the header length includes everything up to the "LIST....movi" label, so you do need to adjust the header length.

Example below: OLD length of JUNK was 8E 05 00 00 (in grey – you only see 94 bytes of JUNK here). Length of LIST is the number of bytes from the beginning of "INFO" to the new location of "JUNK" - in the example below (in yellow), the 4-byte length is 50 00 00 00. So, the NEW "JUNK" length is 36 05 00 00

OLD

Offset	Hex	ASCII
00000260	00 00 00 00 00 00 00 00 00 00 4A 55 4E 4B 8E 05	..........JUNKŽ.
00000270	00 00 76 58 20 44 69 76 58 20 44 69 76 58 20 44	..vX DivX DivX D
00000280	69 76 58 20 44 69 76 58 20 44 69 76 58 20 44 69	ivX DivX DivX Di
00000290	76 58 20 44 69 76 58 20 44 69 76 58 20 44 69 76	vX DivX DivX Div
000002A0	58 20 44 69 76 58 20 44 69 76 58 20 44 69 76 58	X DivX DivX DivX
000002B0	20 44 69 76 58 20 44 69 76 58 20 44 69 76 58 20	DivX DivX DivX
000002C0	44 69 76 58 20 44 69 76 58 20 44 69 76 58 20 44	DivX DivX DivX D

NEW

Offset	Hex	ASCII
00000260	00 00 00 00 00 00 00 00 00 00 4C 49 53 54 50 00	..........LISTP.
00000270	00 00 49 4E 46 4F 49 4E 41 4D 1E 00 00 00 43 6F	..INFOINAM....Co
00000280	76 65 72 74 20 4F 6E 65 3A 20 54 68 65 20 48 61	vert One: The Ha
00000290	64 65 73 20 46 61 63 74 6F 72 00 00 49 43 52 44	des Factor..ICRD
000002A0	06 00 00 00 32 30 30 36 00 00 49 47 4E 52 10 00	....2006..IGNR..
000002B0	00 00 44 72 61 6D 61 2F 54 68 72 69 6C 6C 65 72	..Drama/Thriller
000002C0	00 00 4A 55 4E 4B 36 05 00 00 44 69 76 58 20 44	..JUNK6...DivX D