**MP3 Frame Header Worksheet**

Below are debug hex displays of 3 different MP3 frame headers.  
Using the data shown and the MP3 Frame Header Decoding Key,   
answer the following questions about each of the MP3 frame headers

1.

***13CB:0110*** FF FB 92 64 EE 07 B3 30 - 35 C9 41 E6 1A E2 5C 0C 68 F0  
***13CB:0120*** 0C 63 6E 0D 29 29 24 A4 - 98 CB C9 6E B1 63 D4 31 8D B8  
***13CB:0130*** 64 4E 31 CA C0 F0 1C 38 - C1 9F 93 87 7F FB 07 E9 DB 1F

|  |  |
| --- | --- |
| MPEG Audio Version | V 1 |
| Layer Description | Layer 3 |
| Protection Status | Not Protected |
| Bitrate | 128 kbps |
| Sampling Rate | 44100 hz |
| Channel Mode | Joint Stereo |
| Copyright Status | Not Copyrighted |
| Copy Status | Original |
| Emphasis | None |

2.

***13CB:0110*** FF F2 40 C0 C1 03 00 13 - DA E2 70 01 92 50 01 F0 2C 40  
***13CB:0120*** 75 DE 04 90 1B 3F E2 09 - 95 FF 11 61 76 21 FF 00 40 14  
***13CB:0130*** 04 27 F8 8B 27 88 BF FC - 45 8B 60 D8 22 09 3F FF 3D 0C

|  |  |
| --- | --- |
| MPEG Audio Version | V 1 |
| Layer Description | Layer 3 |
| Protection Status | Protected |
| Bitrate | 32 kbps |
| Sampling Rate | 22050 hz |
| Channel Mode | Stereo |
| Copyright Status | Copyrighted |
| Copy Status | Copy |
| Emphasis | none |

3.

***13CB:0110*** FF FB A0 40 00 0C 88 05-F9 8A 08 00 02 16 AA A7  
***13CB:0120*** FC 4D 0C 36 F5 17 02 04-0E 07 C8 40 71 A0 4C 6A  
***13CB:0130*** AE 3E 18 3F CB 94 1C 34-2C 70 91 3E DE 44 E7 F9

|  |  |
| --- | --- |
| MPEG Audio Version | V 1 |
| Layer Description | Layers 3 |
| Protection Status | Protected |
| Bitrate | 160 kbps |
| Sampling Rate | 44100 hz |
| Channel Mode | Stereo |
| Copyright Status | Copyrighted |
| Copy Status | Original |
| Emphasis | None |