



Sound SDK contains various sound effects and can be easily implemented to Windows applications, which has already been adopted by several audio device manufacturers with a high reputation.

## SDK Forms

DigiOn offers Sound SDK as static link library or DirectX Plugin. Header and library files, sample programs, and documentations are provided for both forms.

## Sample SDK

You can download **"Level Control"** effect SDK as a sample.



(4MB)

The download module consists of header files for static link library and DirectX Plugin, library files, sample programs, and documentations. The interface is consistent to all effects.

Please try the sample for your reference.

## Types of Effects

| Effect               |                    | Description  | Note          |
|----------------------|--------------------|--|---------------|
| Control audio volume | Level              | Controls audio volume.   | Free Download |
|                      | Compressor         | Turns down louder sound without affecting lower sound.             |               |
|                      | Auto level control | Equalizes loudness of sound source.                                |               |
| Change tone          | 10 band graphic EQ | Strengthens or weakens specified 10 pitches.                       |               |
|                      | 20 band graphic EQ | Strengthens or weakens specified 20 pitches.                       |               |
|                      | Parametric EQ      | Strengthens or weakens pitches finely divided into a few thousand. |               |
|                      | Filter             | Cuts high tone sound only or low tone sound only.                  |               |
|                      | Phase inversion    | Inverts phases of specific channels.                               |               |
|                      | Phaser             | Creates a sweeping effect by oscillating sound phase at intervals. |               |

|                 |                                     |  |           |
|-----------------|-------------------------------------|--|-----------|
|                 | Chorus                              | Creates a chorus effect.   |           |
|                 | Voice Conversion                    | Makes human voice sound like a robot.                                      |           |
|                 | Enhancer                            | Makes a sound expansive.   |           |
|                 | Pitch shift                         | Changes the pitch of a sound without affecting its duration.               | Uses MKL. |
|                 | Time stretch                        | Changes the duration of an audio signal without affecting its pitch.       | Uses MKL. |
| Remove noise    | Noise reduction-hiss noise          | Removes high frequency noise present on analogue magnetic tape recordings. |           |
|                 | Noise reduction-hum noise           | Removes noise produced by machinery in operation.                          |           |
|                 | Noise reduction-crackle noise       | Removes crackle noise present on analogue record recordings.               |           |
|                 | Noise gate                          | Removes background noise present on recordings.                            |           |
|                 | Noise reduction by pattern analysis | Removes noise in a pattern produced by air conditioner, projector, etc.    | Uses MKL. |
| Convert channel | Mono > Stereo conversion            | Converts mono to stereo.   |           |
|                 | Stereo > Mono conversion            | Converts stereo to mono.   |           |
|                 | 5.1ch > Stereo conversion           | Down mixes 5.1ch to stereo.  |           |
| Add reverb      | Delay                               | Creates a delay effect.  |           |
|                 | Reverb                              | Creates a reverb effect.   |           |
|                 | Delay matrix                        | Creates a various delay effects.   |           |
| Others          | Vocal cancel                        | Removes vocal from a tune.   |           |
|                 | BPM detection                       | Detects beats per minute.  |           |

※ MKL : Math Kernel Library

Library for arithmetic operations developed by Intel. Required Intel modules will be provided when effect libraries are delivered (Free of charge.)

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