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## "Symphonic JPEGs"

### *Would you let JPEGs write your music?*

Still, I have a broad smile on my face; and still, I'm trying to think: what was the creator of Sound-Hole thinking when this software was born... yet no answer crosses my mind. Whether I think about the simplicity of the idea (great ideas are usually dumb-simple, isn't it?) or about the use of such a software I still am amazed: letting a JPEG picture generate sound...come on, this sounds wacko! Having your favorite pictures as sources for sounds or even further - samples which could be easily mixed and transformed into music seems something far out; yet here it is, on my desktop! I have even saved a very interesting loop I plan to use in my future mixes; should someone ask me how did I create the sounds from that track what would I be supposed to say: "Ah, some JPEGs created those sounds for me, while I was having the first morning coffee cups... nice JPEG - good job!" Beyond the potential hilarious situation, facts remain true: indeed, it was a picture which did not inspire me at all, but which actually generated a sequence of sounds! I guess that many will laugh at me as I will keep saying such words until I will show them the Sound-Hole... and, believe me, I will! Because I intend to use this program thoroughly! OK, enough talking, let's put some JPEGs at work, ha-ha!

**The Looks** The fact is that Sound-Hole looks not just like a hole, but like a black hole (kidding). It is a black, fixed-size window, with grey trimming all around: no skins, no color schemes, no menus, nothing fancy, just plain simplicity and functionality. I guess it was this GUI that has really intrigued me the very first time I ran Sound-Hole: it looked so sober and I felt so clueless that, for a moment, I really had no idea about what I was supposed to do, even if things were rather clear. The title of this software has been placed at the bottom of the main (and only) window and beside it some text reads: "Jpeg to wave creation". Could you think about something weirder? I guess you will be as confused as I was when you'll see yourselves in front of its window; it really is a weird thing to see a software about whom you know it will produce sound but still it looks nothing like any sound-related software you've met so far. The most of the Sound-Hole's GUI is occupied by two very large grey-hairlined squares. In the lower part, on each side - 4 very Windows-like buttons, with highly-readable text on them. Comprised between the button-columns - some text and numbers: Duration, Frequencies, Steps per Octave. It was by simple curiosity that I noticed the fact that those respective numbers were so easily editable by means of simply clicking them and writing down new values. It's true that all other text was grey and the numbers were white, but having numeric values in a different color does not necessarily mean they are editable. I guess the future versions of Sound-Hole should be more explicit in this matter!

Whether you believe me or not...but this is all about the way Sound-Hole looks: it is so simple that I could even feel embarrassed in front of it; I thought of something quite hyper-tech, an interface that would go with the very peculiar issue of JPEGs making music. Instead of all this - the program looks even simpler than MS Paint does (and I guess you all agree with me as I take Paint as a milestone in simple GUIs, ha-ha!).

**The Works!** I simply think that "strange" isn't by far a word good enough to express my consternation as I encountered Sound-Hole. I will say once more that having a JPEG picture generating sound is at least weird :) Now, don't you dare think that it will produce some rhapsody or anything truly "musical": the result will be a WAV file whose generic settings are user-defined. Now, should you ask me how and what must you do in order to obtain a certain sound or even type of sound...I won't be able to tell you anything except for the advice to do as I did, simply loading pictures as different as possible and carefully listen to the resulting sounds :) As I had suddenly found myself in a completely unknown field, I felt I was entitled to experiment whatever crossed my mind; this is how I

even loaded completely black and completely white JPEGs in the Sound-Hole and managed to obtain "black/white/grey" WAV files as I went for mono WAV created from black, mono from white and stereo from both. Coming to stereo, I must add the fact that Sound-Hole is able to produce both mono and stereo files: obviously, you will have to load an image for each channel. I can't tell for sure how does Sound-Hole manage to generate sounds according to a picture and I'll just assume (waiting for you to prove me wrong, if need be) that this software runs such an algorithm which scans the coloring of the picture (much like the spectrum analysis in sound-tech) and reproduces it in the audio field; thus, for each combination of color and intensity (lightness, white balance, contrast, whatever) a new (this time, audio) combo is being produced. Still, this is what I think about the way Sound-Hole's works...In order for the WAV file to be produced, it needs some parameters to be set up by the user: the Duration of the resulting WAVE file, the frequencies between the sound will be generated and the steps per octave. Needless to say that the output file will be strongly related to the way you set these values: for example, the wider the ending points of the frequency-range, the fuller and more complex the sound will be, as well as the complexity of the generated sound being influenced by the number of steps per octave you set the Sound-Hole to produce. The whole generating process runs mainly on CPU-power and, if you intend to set overall "high" values, you must definitely be prepared; about the processing power you are capable of delivering, you should also be prepared to spend the directly-proportional amount of time waiting for the sound to be produced. For example, the last two paragraphs were written during my wait to have a picture generating a 2 seconds, 50Hz-20kHz and 768 steps/octave... as there is no "user's manual for JPEG-generated WAV" yet, I'll just end my article here, hoping you will find Sound-Hole as fun and interesting as I did. I can't wait to explore even more the possibilities and limits of this INTERESTING software. Ah, 2 things I almost forgot about: you can save your creations in either WAV or MIDI format and the best-sounding WAVs were created as I loaded 2 screenshots of Sound-Hole in the Sound-Hole... ha-ha-ha! **The Good** totally liked the Sound-Hole! I will use it from now on and I am pretty sure that many sounds created by various pictures will be featured in my future mixes. **The Bad** can't really speak about the bad things, because I have not seen such things. As a recommendation - the numeric values' "editability" should be indicated in a more visible manner. **The Truth** Truth is that I am really sorry I haven't discovered this piece of code earlier. It's definitely worth downloading and thoroughly using, especially if you are into synth music. *Please see the screenshots below, while you think about which pictures should go in first:*