CLAIMS

1. A haptics device comprising:

an input circuit configured to receive audio input;

a phase determination circuit configured to determine a phase of the audio input;

a peak amplitude determination circuit configured to determine a peak amplitude of the audio input; and

a haptics controller configured to control at least one actuator based on the determined phase of the audio input and based on the determined peak amplitude of the audio input, wherein the haptics controller is further configured to position a channel corresponding to the audio input based on the determined phase of the audio input and based on the determined peak amplitude of the audio input, wherein the positioning of the channel is in time, in phase, or within a relation to an audio stream.

2. The haptics device of claim 1,

wherein the phase determination circuit and the peak amplitude determination circuit are provided in at least one of a software layer or an API control layer .

3. The haptics device of claim 1,

wherein the haptics controller is further configured to control at least one further actuator independent from the determined phase of the audio input and independent from the determined peak amplitude of the audio input.

4. The haptics device of claim 1, further comprising:

a high frequency encode circuit.

5. The haptics device of claim 8, further comprising:

a gate control circuit configured to activate the high frequency encode circuit.

6. The haptics device of claim 1,

wherein the haptics controller is further configured to control the at least one actuator based on user assigned secondary haptics source triggers.

7. The haptics device of claim 1,

wherein the user assigned secondary haptics source triggers are based on a user profile.

8. The haptics device of claim 11,

wherein the user profile is stored in a cloud.

9. The haptics device of claim 1,

wherein the haptics device is provided in a game controller input device.

10. The haptics device of claim 9,

wherein the game controller input device comprises at least one of a joystick or a gamepad.

11. The haptics device of claim 1, further comprising:

the at least one actuator.

12. A method for controlling a haptics device, the method comprising:

receiving audio input by an input circuit;

determining a phase of the audio input by a phase determination circuit;

determining a peak amplitude of the audio input by a peak amplitude determination circuit; and

controlling, by a haptics controller, at least one actuator based on the determined phase of the audio input and based on the determined peak amplitude of the audio input, and positioning a channel corresponding to the audio input based on the determined phase of the audio input and based on the determined peak amplitude of the audio input, wherein the positioning of the channel is in time, in phase, or within a relation to an audio stream.

13. The method of claim 12, further comprising:

positioning the channel corresponding to the audio input in time based on the determined phase of the audio input and based on the determined peak amplitude of the audio input.

14. The method of claim 12, further comprising:

positioning the channel corresponding to the audio input in phase based on the determined phase of the audio input and based on the determined peak amplitude of the audio input.

15. The method of claim 12, further comprising:

positioning the channel corresponding to the audio input within a relation to an audio stream corresponding to the audio input based on the determined phase of the audio input and based on the determined peak amplitude of the audio input.

16. The method of claim 12,

wherein determining the phase and determining the peak amplitude are provided in at least one of a software layer, or an API control layer.

17. The method of claim 12, further comprising:

controlling at least one further actuator independent from the determined phase of the audio input and independent from the determined peak amplitude of the audio input.

18. The method of claim 12, further comprising:

high frequency encoding.

19. The method of claim 18, further comprising:

activating the high frequency encoding.