CLAIMS

1. A device configured to play one or more of a plurality of audio streams comprising: a memory configured to store timing information and the plurality of audio streams, wherein the timing information comprises a delay; and one or more processors coupled to the memory, and configured to: control access to at least one of the plurality of audio streams based on the timing information; detect a trigger; compare the delay to a timer; and wait until the delay is equal to or greater than the timer, starting an update of a plurality of audio sources for the plurality of audio streams, and the plurality of audio sources are updated during an update duration to select a subset of the plurality of audio streams.

2. The device of claim 1, wherein the memory is further configured to store location information associated with coordinates of an acoustical space in which a corresponding one of the plurality of audio streams was captured or synthesized.

3. The device of claim 1, wherein the one or more processors are further configured to combine at least two of the plurality of audio streams by at least one of mixing or interpolation or another variant of soundfield manipulation.

4. The device of claim 1, wherein the one or more processors are further configured to change a gain of one or more of the plurality of audio streams.

5. The device of claim 1, further comprising a display device.

6. The device of claim 5, further comprising a microphone, wherein the one or more processors are further configured to receive a voice command from the microphone and control the display device based on the voice command.

7. The device of claim 1, further comprising one or more speakers.

8. The device of claim 1, wherein the device comprises an extended reality headset, and wherein an acoustical space comprises a scene represented by video data captured by a camera.

9. The device of claim 1, wherein the device comprises an extended reality headset, and wherein an acoustical space comprises a virtual world.

10. The device of claim 1, further comprising a head-mounted display configured to present an acoustical space.

11. The device of claim 1, wherein the device comprises one of a mobile handset or a vehicle.

12. The device of claim 1, further comprising a wireless transceiver, the wireless transceiver being coupled to the one or more processors and being configured to receive a wireless signal.

13. A method of playing one or more of a plurality of audio streams comprising: storing, by a memory, timing information and the plurality of audio streams, wherein the timing information comprises a delay; controlling access to at least one of the plurality of audio streams based on the timing information; detecting a trigger; comparing the delay to a timer; and waiting until the delay is equal to or greater than the timer, starting an update of a plurality of audio sources for the plurality of audio streams, and the plurality of audio sources are updated during an update duration to select a subset of the plurality of audio streams.

14. The method of claim 13, further comprising storing location information associated with coordinates of an acoustical space in which a corresponding one of the plurality of audio streams was captured or synthesized.

15. The method of claim 13, further comprising combining at least two of the plurality of audio streams by at least one of mixing or interpolation or another variant of soundfield manipulation.

16. The method of claim 13, further comprising changing a gain of one or more of the plurality of audio streams.

17. The method of claim 13, further comprising receiving, by a microphone, a voice command and controlling a display device based on the voice command.

18. The method of claim 13, further comprising outputting at least one of the plurality of audio streams to one or more speakers.

19. The method of claim 13, wherein an acoustical space comprises a scene represented by video data captured by a camera.

20. The method of claim 13, wherein an acoustical space comprises a virtual world.

21. The method of claim 13, further comprising presenting an acoustical space on a head-mounted device.

22. The method of claim 13, further comprising presenting an acoustical space on a mobile handset or in a vehicle.

23. The method of claim 13, further comprising receiving a wireless signal.