

CLAIMS:

1. A system, comprising:
 - a projection device configured to emit a plurality of light beams, wherein each individual light beam is emitted with a unique path within an environment, and wherein each individual light beam comprises a modulation pattern configured to transmit position data corresponding to the unique path; and
 - a receiver device, comprising:
 - a sensor configured to detect at least one individual light beam of the plurality of light beams;
 - a receiver processor configured to identify the modulation pattern of the detected individual light beam and generate response instructions based on the position data transmitted via the modulation pattern; and
 - an output device configured to output a response based on the generated response instructions.
2. The system of claim 1, wherein the receiver device comprises a display device having a screen, and wherein the response comprises displaying an image on the screen based on the generated response instructions.
3. The system of claim 2, wherein the display device comprises glasses, wherein the glasses are configured to display the image on at least one lens of the glasses such that the image is viewable for a guest wearing the glasses.
4. The system of claim 1, wherein the receiver device is configured to output a special effect based on the generated response instructions.
5. The system of claim 1, wherein the receiver device comprises an aerial drone, and wherein the aerial drone is configured to follow a flight path, activate a special

effect, release a special effect, or some combination thereof, based on the generated response instructions.

6. The system of claim 1, wherein the plurality of light beams comprises a first group of light beams and a second group of light beams, wherein each light beam corresponding to the first group of light beams comprises a first modulation pattern indicative of a first area through which respective unique paths of each light beam of the first group of light beams are configured to pass, and wherein each light beam corresponding to the second group of light beams comprises a second modulation pattern indicative of a second area through which respective unique paths of each light beam of the second group of light beams are configured to pass.

7. The system of claim 6, wherein the receiver processor is configured to generate a first set of response instructions based on the first modulation pattern and a second set of response instructions based on the second modulation pattern, and wherein the output device is configured to output a first response based on the first set of response instructions when the receiver device is disposed within the first area and output a second response based on the second set of response instructions when the receiver device is disposed within the second area.

8. The system of claim 1, wherein the projection device comprises an infrared light source, and wherein the plurality of light beams comprise infrared light.

9. The system of claim 1, wherein the projection device comprises a digital micro-mirror assembly configured to actuate at least one micro-mirror to selectively reflect light from a light source to generate the modulation pattern of each individual light beam of the plurality of light beams.

10. The system of claim 1, wherein a receiver memory of the receiver device comprises at least one set of decoding instructions for the receiver processor, wherein the at least one set of decoding instructions corresponds to detected light beams within a range of frequencies, wherein the at least one set of decoding instructions is configured to cause the receiver processor to decode the modulation pattern of the detected light beams within the range of frequencies.

11. The system of claim 1, comprising an additional projection device configured to emit an additional plurality of light beams, the additional plurality of light beams comprising additional modulation patterns, wherein the projection device is configured to emit the plurality of light beams at frequencies within a first range of frequencies, and wherein the additional projection device is configured to emit the additional plurality of light beams at frequencies within a second range of frequencies.

12. The system of claim 11, wherein the receiver processor is configured to determine a position of the receiver device and generate the response instructions based at least in part on the position of the receiver device, wherein the processor is configured to determine the position of the receiver device based at least in part on the modulation pattern of at least one detected light beam within the first range of frequencies and the additional modulation pattern of at least one additional detected light beam within the second range of frequencies.

13. The system of claim 11, wherein the additional projection device is configured to emit the additional plurality of light beams in a direction angularly offset from the direction of the plurality of light beams.

14. A system, comprising:
a system controller configured to generate a plurality of image data instruction sets, wherein each image data instruction set corresponds to a respective area;

a projection device configured to emit a plurality of light beams simultaneously, wherein an individual light beam of the plurality of light beams comprises a modulation pattern configured to transmit image data based on the image data instruction set corresponding to the area through which the individual light beam is configured to pass;

a receiver device, comprising:

a sensor configured to detect the individual light beam of the plurality of light beams;

a processor configured to determine the image data based on the modulation pattern of the detected individual light beam;
and

a display device configured to display an image based on the image data.

15. The system of claim 14, wherein the display device comprises glasses, wherein the glasses are configured to display the image on at least one lens of the glasses such that the image is viewable for a guest wearing the glasses.

16. The system of claim 14, wherein the image comprises a textual image, a picture image, a video image, or some combination thereof.

17. The system of claim 14, wherein the projection device comprises a digital micro-mirror assembly configured to actuate at least one micro-mirror to selectively reflect light from a light source to generate the modulation pattern in the individual light beam.

18. The system of claim 14, wherein the projection device is disposed vertically above the respective areas.

19. A method, comprising:
- emitting a plurality of light beams via a projection device, wherein each individual light beam of the plurality of light beams comprises a unique modulation pattern configured to transmit data corresponding to a respective area;
 - detecting an individual light beam of the plurality of light beams via a receiver device;
 - generating response instructions based on data received by a receiver device via the unique modulation pattern of the detected light beam; and
 - outputting a response based on the response instructions via an output device.
20. The method of claim 19, wherein the output device comprises glasses, and wherein the response comprises displaying an image on at least one lens of the glasses such that the image is viewable for a guest wearing the glasses, wherein the image comprises a textual image, a picture image, a video image, or some combination thereof.
21. A system, comprising:
- a projection device configured to emit a plurality of light beams, wherein each individual light beam is emitted with a unique path within an environment, and wherein each individual light beam comprises a modulation pattern configured to transmit position data corresponding to the unique path; and
 - a receiver device, comprising:
 - a sensor configured to detect at least one individual light beam of the plurality of light beams to generate sensor data indicative of the modulation pattern; and
 - communications circuitry configured to transmit the sensor data and
 - a system controller configured to receive the sensor data and determine a position of the receiver device within the environment.

22. The system of claim 22, wherein the plurality of light beams are infrared light.

CLAIMS:

1. A spatial projection system, comprising:
 - a projection device configured to emit a plurality of light beams, wherein each individual light beam is emitted with a unique path within an environment, and wherein each individual light beam comprises a modulation pattern configured to transmit position data corresponding to the unique path; and
 - a receiver device, comprising:
 - a sensor configured to detect at least one individual light beam of the plurality of light beams;
 - a receiver processor configured to identify the modulation pattern of the detected individual light beam and generate response instructions based on the position data transmitted via the modulation pattern; and
 - an output device configured to output a response based on the generated response instructions.
2. The spatial projection system of claim 1, wherein the receiver device comprises a display device having a screen, and wherein the response comprises displaying an image on the screen based on the generated response instructions.
3. The spatial projection system of claim 2, wherein the display device comprises glasses, wherein the glasses are configured to display the image on at least one lens of the glasses such that the image is viewable for a guest wearing the glasses.
4. The spatial projection system of claim 1, wherein the receiver device is configured to output a special effect based on the generated response instructions.
5. The spatial projection system of claim 1, wherein the receiver device comprises an aerial drone, and wherein the aerial drone is configured to follow a flight path, activate a special effect, release a special effect, or some combination thereof, based

on the generated response instructions.

6. The spatial projection system of claim 1, wherein the plurality of light beams comprises a first group of light beams and a second group of light beams, wherein each light beam corresponding to the first group of light beams comprises a first modulation pattern indicative of a first area through which respective unique paths of each light beam of the first group of light beams are configured to pass, and wherein each light beam corresponding to the second group of light beams comprises a second modulation pattern indicative of a second area through which respective unique paths of each light beam of the second group of light beams are configured to pass.

7. The spatial projection system of claim 6, wherein the receiver processor is configured to generate a first set of response instructions based on the first modulation pattern and a second set of response instructions based on the second modulation pattern, and wherein the output device is configured to output a first response based on the first set of response instructions when the receiver device is disposed within the first area and output a second response based on the second set of response instructions when the receiver device is disposed within the second area.

8. The spatial projection system of claim 1, wherein the projection device comprises an infrared light source, and wherein the plurality of light beams comprise infrared light.

9. The spatial projection system of claim 1, wherein the projection device comprises a digital micro-mirror assembly configured to actuate at least one micro-mirror to selectively reflect light from a light source to generate the modulation pattern of each individual light beam of the plurality of light beams.

10. The spatial projection system of claim 1, wherein a receiver memory of the receiver device comprises at least one set of decoding instructions for the receiver processor, wherein the at least one set of decoding instructions corresponds to detected light beams within a range of frequencies, wherein the at least one set of decoding instructions is configured to cause the receiver processor to decode the modulation pattern of the detected light beams within the range of frequencies.

11. The spatial projection system of claim 1, comprising an additional projection device configured to emit an additional plurality of light beams, the additional plurality of light beams comprising additional modulation patterns, wherein the projection device is configured to emit the plurality of light beams at frequencies within a first range of frequencies, and wherein the additional projection device is configured to emit the additional plurality of light beams at frequencies within a second range of frequencies.

12. The spatial projection system of claim 11, wherein the receiver processor is configured to determine a position of the receiver device and generate the response instructions based at least in part on the position of the receiver device, wherein the processor is configured to determine the position of the receiver device based at least in part on the modulation pattern of at least one detected light beam within the first range of frequencies and the additional modulation pattern of at least one additional detected light beam within the second range of frequencies.

13. The spatial projection system of claim 11, wherein the additional projection device is configured to emit the additional plurality of light beams in a direction angularly offset from the direction of the plurality of light beams.

14. A spatial projection system, comprising:
a system controller configured to generate a plurality of image data instruction sets, wherein each image data instruction set corresponds to a respective area;

a projection device configured to emit a plurality of light beams simultaneously, wherein an individual light beam of the plurality of light beams comprises a modulation pattern configured to transmit image data based on the image data instruction set corresponding to the area through which the individual light beam is configured to pass;

a receiver device, comprising:

a sensor configured to detect the individual light beam of the plurality of light beams;

a processor configured to determine the image data based on the modulation pattern of the detected individual light beam;
and

a display device configured to display an image based on the image data.

15. The spatial projection system of claim 14, wherein the display device comprises glasses, wherein the glasses are configured to display the image on at least one lens of the glasses such that the image is viewable for a guest wearing the glasses.

16. The spatial projection system of claim 14, wherein the image comprises a textual image, a picture image, a video image, or some combination thereof.

17. The spatial projection system of claim 14, wherein the projection device comprises a digital micro-mirror assembly configured to actuate at least one micro-mirror to selectively reflect light from a light source to generate the modulation pattern in the individual light beam.

18. The spatial projection system of claim 14, wherein the projection device is disposed vertically above the respective areas.

19. A spatial projection method, comprising:
emitting a plurality of light beams via a projection device, wherein each individual light beam of the plurality of light beams comprises a unique modulation pattern configured to transmit data corresponding to a respective area;
detecting an individual light beam of the plurality of light beams via a receiver device;
generating response instructions based on data received by a receiver device via the unique modulation pattern of the detected light beam; and
outputting a response based on the response instructions via an output device.

20. The spatial projection method of claim 19, wherein the output device comprises glasses, and wherein the response comprises displaying an image on at least one lens of the glasses such that the image is viewable for a guest wearing the glasses, wherein the image comprises a textual image, a picture image, a video image, or some combination thereof.

21. A spatial projection system, comprising:
a projection device configured to emit a plurality of light beams, wherein each individual light beam is emitted with a unique path within an environment, and wherein each individual light beam comprises a modulation pattern configured to transmit position data corresponding to the unique path; and
a receiver device, comprising:
a sensor configured to detect at least one individual light beam of the plurality of light beams to generate sensor data indicative of the modulation pattern; and
communications circuitry configured to transmit the sensor data and
a system controller configured to receive the sensor data and determine a

position of the receiver device within the environment.