CLAIMS

What Is Claimed Is:

1. An image projecting device for producing a physiological illusion in a viewing guest, the device comprising:

a housing comprising a transparent projection surface;

a strobe light supported by the housing and configured to illuminate the transparent projection surface;

an object interposed between said strobe and said transparent projection surface,

an image located on the transparent projection surface; and

a controller configured to activate and set duration of the strobe light at a predetermined time to produce a physiological illusion of the image in the viewing guest.

2. The device of claim 1, wherein the transparent projection surface comprises two separate plies forming a gap for insertion of an imaging plate.

3. The device of claim 2, wherein the imaging plate comprises a plurality of imaging plates, each imaging plate having a different image located thereon.

4. The device of claim 3, wherein the imaging plates comprise a positive object having a solid silhouette outline.

5. The device of claim 3, wherein the imaging plates comprise a negative object having a transparent silhouette outline.

6. The device of claim 1, wherein the imaging plate is automatically changeable

7. The device of claim 1, wherein the imaging plate is manually changeable by an operator.

8. The device of claim 1, wherein the strobe comprises a plurality of light emitting diodes.

9. The device of claim 8, wherein the plurality of light emitting diodes is an array of light emitting diodes forming an image.

10. An image projecting device for producing a physiological illusion in a viewing guest, the device comprising:

a housing comprising a transparent projection surface;

a strobe light supported by the housing and configured to illuminate the transparent projection surface;

an image located on the transparent projection surface; and

a controller configured to activate and set duration of the strobe light at a predetermined time to produce a physiological illusion of the image in the viewing guest;

wherein the controller is further configured generate the image located on the transparent projection surface.

11. The device of claim 10, wherein the controller is further configured to provide a signal to the transparent display that, in turn, generates the image.

12. The device of claim 10, wherein the image comprises at least one of a silhouette and an outline.

13. The device of claim 10, wherein the controller comprises a microprocessor configured to alter the image at predetermined intervals.

14. The device of claim 10, wherein the object silhouette is a deer, pig, building, tree or human face.

15. The device of claim 10, wherein the transparent projection surface is an transparent LCD screen.

16. The device of claim 10, wherein the strobe comprises a plurality of light emitting diodes.

17. The device of claim 16, wherein the plurality of light emitting diodes is an array of light emitting diodes forming an image.

18. A method for producing a physiological illusion in a viewing guest, the method comprising:

providing a projection device comprising a housing having a transparent projection surface and a strobe light supported by the housing;

producing the object silhouette on the transparent projection surface;

activating the strobe when the guest is at a predetermined position and at a time when the guest is in a dark environment;

producing a physiological illusion of the image in the viewing guest.

19. The method of claim 18, further comprising producing a second object silhouette on the transparent projection surface and repeating the activating and producing steps.

20. The method of claim 18 wherein producing the object silhouette comprises controlling the object silhouette with a microprocessor, the microprocessor configured to alter the image silhouette at known intervals.

21. The method of claim 18, wherein the object silhouette is a deer, pig, building, tree or human face.

22. The method of claim 18, wherein the image is produced on a transparent LCD screen

23. The method of claim 18, wherein the strobe comprises a plurality of light emitting diodes.

24. The method of claim 23, wherein the plurality of light emitting diodes comprises an array of light emitting diodes forming an image.

25. A system for producing a physiological illusion in a viewing guest, the method comprising:

a projection device comprising a housing, the housing having a transparent projection surface;

a strobe light supported by the housing; and

an opaque three dimensional object proximate the transparent projection surface;

wherein the opaque three dimensional object defines a negative or positive space occupied by a two-dimensional image, and wherein the strobe is

activated when the viewing guest is at a predetermined position and at a time when the viewing guest is in a dark environment to produce a physiological illusion of the image in the viewing guest.

26. The system of claim 25, wherein the opaque three-dimensional object comprises an opaque mask.

27. The system of claim 25, wherein the opaque three-dimensional object is located directly adjacent and between the transparent projection surface and the strobe.

CLAIMS

1. An image projecting device for producing a physiological illusion for a viewing guest, the device comprising:

a housing comprising a transparent projection surface;

a stroboscopic lamp supported by the housing and configured to illuminate the transparent projection surface with a flash of light;

an image located on the transparent projection surface; and

a controller configured to activate the stroboscopic lamp to produce a physiological illusion of the image for the viewing guest when an amusement ride vehicle is in a particular position.

2. The device of claim 1, comprising an imaging plate, wherein the transparent projection surface comprises two separate plies forming a gap configured to receive the imaging plate.

3. The device of claim 2, wherein the imaging plate is automatically changeable.

4. The device of claim 2, wherein the imaging plate is manually changeable by an operator.

5. The device of claim 1, comprising a plurality of imaging plates inserted between two separate plies of the transparent projection surface, each of the plurality of imaging plates having a different image located thereon.

6. The device of claim 5, wherein the imaging plates comprise a positive object having a solid silhouette outline.

7. The device of claim 5, wherein the imaging plates comprise a negative object having a transparent silhouette outline.

8. The device of claim 1, wherein the stroboscopic lamp comprises a plurality of light emitting diodes.

9. The device of claim 8, wherein the plurality of light emitting diodes is an array of light emitting diodes forming an image.

10. The device of claim 1, wherein the flash of light comprises an energy of approximately 10 to 150 joules and a discharge time of approximately 2 to 3 milliseconds.

11. The device of claim 1, wherein the housing comprises a plurality of sides configured to direct the flash of light toward the transparent projection surface.

12. The device of claim 1, wherein the particular position is detected by a sensor positioned on a path traveled by the amusement ride vehicle.

13. An image projecting device for producing a physiological illusion for a viewing guest, the device comprising:

a housing comprising a transparent projection surface;

a stroboscopic lamp supported by the housing and configured to illuminate the transparent projection surface with a flash of light;

an image located on the transparent projection surface; and

a controller configured to activate the stroboscopic lamp at a predetermined time to produce a physiological illusion of the image for the viewing guest, wherein the predetermined time is when an amusement ride vehicle guiding the viewing guest is at a particular position.

14. The device of claim 13, wherein the controller is further configured to provide a signal to a display that, in turn, generates the image.

15. The device of claim 13, wherein the image comprises at least one of a silhouette and an outline.

16. The device of claim 13, wherein the controller comprises a microprocessor configured to alter the image at predetermined intervals.

17. The device of claim 13, wherein the transparent projection surface is an transparent LCD screen and the image is defined by liquid crystals of the LCD screen.

18. The device of claim 13, wherein the stroboscopic lamp comprises a plurality of light emitting diodes.

19. The device of claim 18, wherein the plurality of light emitting diodes is an array of light emitting diodes forming an image.

20. The device of claim 13, wherein the particular position is detected by a sensor positioned on a path traveled by the amusement ride vehicle.

21. A method for producing a physiological illusion for a viewing guest, the method comprising:

producing an object silhouette on a transparent projection surface of a housing with a stroboscopic lamp supported by the housing;

guiding the viewing guest to a predetermined position with an amusement ride vehicle;

activating the stroboscopic lamp when the guest is at the predetermined position as determined by a sensor positioned on a path traveled by the amusement ride vehicle and at a time when the guest is in a dark environment as determined by the sensor positioned on the path traveled by the amusement ride vehicle;

producing a physiological illusion of the object silhouette for the viewing guest with a flash of light generated by the stroboscopic lamp.

22. The method of claim 21, further comprising producing a second object silhouette on the transparent projection surface and repeating the activating and producing steps.

23. The method of claim 21 wherein producing the object silhouette comprises controlling the object silhouette with a microprocessor, the microprocessor configured to alter the image silhouette at known intervals.

24. The method of claim 21, wherein the image is produced on a transparent LCD screen.

25. The method of claim 21, wherein the stroboscopic lamp comprises a plurality of light emitting diodes.

26. The method of claim 25, wherein the plurality of light emitting diodes comprises an array of light emitting diodes forming an image.

27. A system for producing a physiological illusion for a viewing guest, the system comprising:

a projection device comprising a housing, the housing having a transparent projection surface;

a stroboscopic lamp supported by the housing;

an opaque three dimensional object proximate the transparent projection surface; and

a controller configured to activate the stroboscopic lamp to produce a flash of light when the viewing guest is at a predetermined position and at a time when the viewing guest is in a dark environment, as detected by a sensor positioned on a path traveled by an amusement ride vehicle guiding the viewing guest, to produce a physiological illusion of the image for the viewing guest,

wherein the time is when the amusement ride vehicle guiding the viewing guest is at the predetermined position, wherein the opaque three dimensional object defines a positive space occupied by a two-dimensional image.