a plurality of light elements coupled to the bottom surface of the printed circuit board assembly, the printed circuit board assembly programmed to energize the plurality of light elements following depression of a first control button; a lens coupled to the bottom surface of the printed circuit board assembly and the plurality of light elements, the lens comprising (i) a first angled reflective surface, (ii) a lens top surface, (iii) a lens bottom surface extending parallel to the lens top surface, and (iv) a plurality of side surfaces extending perpendicular to the lens top surface and the lens bottom surface; and a bottom housing coupled to the lens; wherein the lens is configured to project a light emitted from the plurality of light elements through the plurality of side surfaces.

[0008] In another embodiment, the present disclosure provides a safety light including:

a top housing comprising a wall; a printed circuit board assembly coupled to the top housing, the printed circuit board assembly comprising a top surface, a bottom surface, and a rechargeable power source; a plurality of light elements coupled to the bottom surface of the printed circuit board assembly, the printed circuit board assembly programmed to energize a first group of the plurality of light elements following depression of a first control button and a second group of the plurality of light elements following depression of a second control button;

a beacon light element coupled to the top surface of the printed circuit board assembly, the printed circuit board assembly is programmed to energize the beacon light element following depression of a third control button;

a beacon light lens coupled to the beacon light element, the beacon light lens extending through the wall of the top housing;

a lens coupled to the bottom surface of the printed circuit board assembly and the plurality of light elements, the lens comprising (i) a first angled reflective surface, (ii) a bottom angled reflective surface, (iii) a lens top surface, (iv) a lens bottom surface extending parallel to the lens top surface, and (v) a plurality of side surfaces extending perpendicular to the lens top surface and the lens bottom surface, and the angle between the bottom reflective surface and the first angled reflective surface is from 110° to 150°; and a bottom housing coupled to the lens, the bottom housing comprising a magnet.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Figure 1 is a perspective view of a safety light in accordance with an embodiment of the present disclosure.

[0010] Figure 2 is a perspective view of a top housing in accordance with an embodiment of the present disclosure.

[0011] Figure 3 is a top plan view of the top housing.

CLAIMS

We Claim:

1. A safety light comprising:

a top housing;

a printed circuit board assembly coupled to the top housing, the printed circuit board assembly comprising a top surface and a bottom surface;

a plurality of light elements coupled to the bottom surface of the printed circuit board assembly, the printed circuit board assembly programmed to energize the plurality of light elements following depression of a first control button;

a lens coupled to the bottom surface of the printed circuit board assembly and the plurality of light elements, the lens comprising (i) a first angled reflective surface, (ii) a lens top surface, (iii) a lens bottom surface extending parallel to the lens top surface, and (iv) a plurality of side surfaces extending perpendicular to the lens top surface and the lens bottom surface; and

a bottom housing coupled to the lens;

wherein the lens is configured to project a light emitted from the plurality of light elements through the plurality of side surfaces.

2. The safety light of claim 1 wherein the lens bottom surface is a bottom reflective surface and the angle between the bottom reflective surface and the first angled reflective surface is from 110° to 150°.

3. The safety light of claim 1 wherein the lens further comprises a second angled reflective surface and the angle between the first angled reflective surface and the second angled reflective surface is from 80° to 100°.

4. The safety light of claim 1 wherein the plurality of light elements emit the light directed away from the bottom surface of the printed circuit board assembly and the light reflects off of the first angled reflective surface of the lens and projects through the plurality of side surfaces of the lens.

5. The safety light of claim 1 wherein the lens comprises four side surfaces.

6. The safety light of claim 1 wherein the light elements are light emitting diodes (LEDs).

7. The safety light of claim 1 wherein the bottom housing further comprises a magnet.

8. The safety light of claim 1 further comprising:

a beacon light element coupled to the top surface of the printed circuit board assembly; and

a beacon light lens coupled to the beacon light element, the beacon light lens extending through a wall of the top housing;

wherein the printed circuit board assembly is programmed to energize the beacon light element following depression of a second control button.

9. The safety light of claim 1 wherein the printed circuit board assembly further comprises a rechargeable power source.

10. A safety light comprising:

a top housing comprising a wall;

a printed circuit board assembly coupled to the top housing, the printed circuit board assembly comprising a top surface, a bottom surface, and a rechargeable power source;

a plurality of light elements coupled to the bottom surface of the printed circuit board assembly, the printed circuit board assembly programmed to energize a first group of the plurality of light elements following depression of a first control button and a second group of the plurality of light elements following depression of a second control button;

a beacon light element coupled to the top surface of the printed circuit board assembly, the printed circuit board assembly is programmed to energize the beacon light element following depression of a third control button;

a beacon light lens coupled to the beacon light element, the beacon light lens extending through the wall of the top housing;

a lens coupled to the bottom surface of the printed circuit board assembly and the plurality of light elements, the lens comprising (i) a first angled reflective surface, (ii) a bottom angled reflective surface, (iii) a lens top surface, (iv) a lens bottom surface extending parallel to the lens top surface, and (v) a plurality of side surfaces extending perpendicular to the lens top surface and the lens bottom surface, and the angle between the bottom reflective surface and the first angled reflective surface is from 110° to 150°; and

a bottom housing coupled to the lens, the bottom housing comprising a magnet;

wherein the lens is configured to project a light emitted from the plurality of light elements through the plurality of side surfaces.

11. The safety light of claim 1 wherein the lens comprises a plurality of spacing posts coupled to the lens top surface;

each spacing post comprises a top surface in contact with the bottom surface of the printed circuit board assembly; and

the light elements are not in direct contact with the lens.