WHAT IS CLAIMED IS:

1. A powered ophthalmic lens, the powered ophthalmic lens comprising:

a contact lens including an optic zone and a peripheral zone; and

an emitter-detector pair sensor system incorporated into the peripheral zone of the contact lens, the emitter-detector pair sensor system comprising an emitter for sending out a signal, a detector for capturing a reflection of the signal, a controller operatively associated with the emitter and detector configured to determine the distance between the contact lens and an object and output a control signal based on the determined distance, and at least one actuator configured to receive the control signal and implement a predetermined function,

wherein the emitter comprises circuitry to output an ultrasonic signal or an infrared signal.

2. The powered ophthalmic lens according to Claim 1, wherein the contact lens comprises a variable-power optic incorporated into the optic zone.

3. The powered ophthalmic lens according to Claim 2, wherein the actuator configures the variable-power optic for either near or for distance vision in response to the determined distance.

4. The powered ophthalmic lens according to Claim 1, wherein the controller comprises a microcontroller and associated memory.

5. The powered ophthalmic lens according to Claim 1, further comprising a power supply.

6. The powered ophthalmic lens according to Claim 5, wherein the power supply comprises a battery.

7. A powered ophthalmic lens, the powered ophthalmic lens comprising:

a contact lens; and

an emitter-detector pair sensor system incorporated into the contact lens, the emitter-detector pair sensor system comprising an emitter for sending out a signal, a detector for capturing a reflection of the signal, a controller operatively associated

with the emitter and detector configured to determine the distance between the contact lens and an object and output a control signal based on the determined distance, and at least one actuator configured to receive the control signal and implement a predetermined function,

wherein the emitter comprises circuitry to output an ultrasonic signal or an infrared signal.

8. The powered ophthalmic lens according to Claim 7, wherein the contact lens comprises a variable-power optic incorporated into the optic zone.

9. The powered ophthalmic lens according to Claim 8, wherein the actuator configures the variable-power optic for either near or for distance vision in response to the determined distance.

10. The powered ophthalmic lens according to Claim 7, wherein the controller comprises a microcontroller and associated memory.

11. The powered ophthalmic lens according to Claim 7, further comprising a power supply.

12. The powered ophthalmic lens according to Claim 11, wherein the power supply comprises a battery.

13. A powered ophthalmic lens, the powered ophthalmic lens comprising: an intraocular lens; and

an emitter-detector pair sensor system incorporated into the intraocular lens, the emitter-detector pair sensor system comprising an emitter for sending out a signal, a detector for capturing a reflection of the signal, a controller operatively associated with the emitter and detector configured to determine the distance between the contact lens and an object and output a control signal based on the determined distance, and at least one actuator configured to receive the control signal and implement a predetermined function,

wherein the emitter comprises circuitry to output an ultrasonic signal or an infrared signal.

WHAT IS CLAIMED IS:

1. A powered ophthalmic lens, the powered ophthalmic lens comprising:

a contact lens including an optic zone and a peripheral zone; and

an emitter-detector pair sensor system incorporated into the peripheral zone of the contact lens, the emitter-detector pair sensor system comprising an emitter for sending out a signal, a detector for capturing a reflection of the signal, a controller operatively associated with the emitter and detector configured to determine the distance between the contact lens and an object and output a control signal based on the determined distance, and at least one actuator configured to receive the control signal and implement a predetermined function,

wherein the emitter comprises circuitry to output an infrared signal.

2. The powered ophthalmic lens according to Claim 1, wherein the contact lens comprises a variable-power optic incorporated into the optic zone.

3. The powered ophthalmic lens according to Claim 2, wherein the actuator configures the variable-power optic for either near or for distance vision in response to the determined distance.

4. The powered ophthalmic lens according to Claim 1, wherein the controller comprises a microcontroller and associated memory.

5. The powered ophthalmic lens according to Claim 1, further comprising a power supply.

6. The powered ophthalmic lens according to Claim 5, wherein the power supply comprises a battery.

7. A powered ophthalmic lens, the powered ophthalmic lens comprising:

a contact lens; and

an emitter-detector pair sensor system incorporated into the contact lens, the emitter-detector pair sensor system comprising an emitter for sending out a signal, a detector for capturing a reflection of the signal, a controller operatively associated with the emitter and detector configured to determine the distance between the contact lens and an object and output a control signal based on the determined distance, and at least one actuator configured to receive the control signal and implement a predetermined function,

wherein the emitter comprises circuitry to output an an infrared signal.

8. The powered ophthalmic lens according to Claim 7, wherein the contact lens comprises a variable-power optic incorporated into the optic zone.

9. The powered ophthalmic lens according to Claim 8, wherein the actuator configures the variable-power optic for either near or for distance vision in response to the determined distance.

10. The powered ophthalmic lens according to Claim 7, wherein the controller comprises a microcontroller and associated memory.

11. The powered ophthalmic lens according to Claim 7, further comprising a power supply.

12. The powered ophthalmic lens according to Claim 11, wherein the power supply comprises a battery.

13. A powered ophthalmic lens, the powered ophthalmic lens comprising: an intraocular lens; and

an emitter-detector pair sensor system incorporated into the intraocular lens, the emitter-detector pair sensor system comprising an emitter for sending out a signal, a detector for capturing a reflection of the signal, a controller operatively associated with the emitter and detector configured to determine the distance between the contact lens and an object and output a control signal based on the determined distance, and at

least one actuator configured to receive the control signal and implement a predetermined function,

wherein the emitter comprises circuitry to output an an infrared signal.