be located in the receiver of the firearm. In another embodiment, the one or more Hall-effect sensors are located on a circuit board.

In one aspect, the disclosure relates to a system comprising: a viewing optic having (a) a main tube; (b) an objective lens system coupled to a first end of the main tube; (c) an ocular system coupled to a second end of the main tube, an erector lens system located between the objective lens system and the ocular lens system, a first focal plane between the objective lens system and the erector lens system, a beam combiner located between the objective lens system and the first focal plane,~~an optical system configured to focus a target image from an outward scene to a first focal plane~~ and an active display configured to generate a digital image, and a round counter configured to track ammunition status and to communicate ammunition status to the active display; wherein the ammunition status is projected into the first focal plane of the viewing optic.

In another aspect, the disclosure relates to a system comprising: a viewing optic having: (a) a main tube; (b) an objective lens system coupled to a first end of the main tube that focuses a target image from an outward scene; (c) an ocular lens system coupled to ~~the~~ a second end of the main tube, (d) an erector lens system located between the objective lens system and the ocular lens system, (e) a first focal plane between the objective lens system and the erector lens system, (f) a beam combiner located between the objective lens system and the first focal plane~~the main tube, objective system and ocular system being configured to define at least a first focal plane~~; and (~~d~~g) an active display configured to generate a digital image; and a round counter system comprising a magazine follower having one or more magnets inserted into a magazine and multiple magnetic sensors placed on a magwell, wherein an activated magnetic sensor corresponds to ~~the~~ a position of the magazine follower, and a processor configured to correlate the position of the magazine follower with ammunition status and to communicate with the active display, wherein the ammunition status is projected into the first focal plane of the viewing optic.

In an embodiment~~a third aspect~~, the disclosure relates to a method comprising: (a) moving a magazine follower with one or more magnets through a magazine; (b) activating a magnetic sensor when the magazine follower is in proximity to the magnetic sensor; (c) determining ammunition status based on the position of the magazine follower as indicated by the activated magnetic sensor; (d) communicating the ammunition status to an active display in a viewing optic; (e) generating a digital image of the ammunition status using the active display; and (f) projecting the digital image into the first focal plane of the viewing optic.

In an embodimenta ~~fourth aspect~~, the disclosure relates to a system comprising: (a) a firearm having magnetic sensors on the receiver; (b) a round counter system coupled to the firearm and having a magazine follower having one or more magnets inserted into a magazine; wherein one or more magnetic sensors detect the magnetic field as the magazine follower moves through the magazine; and further wherein the height of the magazine follower correlates with a number of rounds in the magazine; and (c) viewing optic having an optical system configured to focus a target image from an outward scene to a first focal plane; wherein the active display projects the number of rounds in the magazine into the first focal plane of the viewing optic.

In an embodimenta ~~fifth aspect~~, the disclosure relates to a system comprising: (a) a round counter system having a magazine follower with one or more magnets, wherein as the magazine follower moves through the magazine, the magnet is positioned in front of one or more Hall-effect sensors on a circuit board; (b) a processing unit configured to correlate the height of the magazine folloxver with the number of rounds remaining in the magazine; and (c) a viewing optic having an optical system configured to focus a target image from an outward scene to a first focal plane; wherein the active display projects the number of rounds in the magazine into the first focal plane of the viewing optic.

In an embodimenta ~~sixth aspect~~, the disclosure relates to a system comprising: a round counter system having a magazine follower having one or more magnets inserted into a magazine; wherein the magazine has one or more ferrous wires configured to detect the magnetic field as the magazine follower moves through the magazine and one or more nodes configured to communicate with one or more magnetic sensors; and further wherein the height of the magazine follower correlates with a number of rounds in the magazine; and viewing optic having an optical system configured to focus a target image from an outward scene to a first focal plane; wherein the active display projects the number of rounds in the magazine into the first focal plane of the viewing optic.

In ~~a seventh aspect~~an embodiment, the disclosure relates to a system comprising: (a) a round counter system having a magazine follower with one or more magnets, and a magazine with one or more ferrous wires configured to detect a magnetic field; (b) a processing unit configured to correlate height of the magazine follower based on activation of the ferrous wires with the number of rounds in the magazine; and (c) a viewing optic having an optical system configured to

focus a target image from an outward scene to a first focal plane; wherein the active display projects the number of rounds in the magazine into the first focal plane of the viewing optic.

In one embodiment, the viewing optic has a main tube, an objective system coupled to a first end of the main tube and an ocular system coupled to a second end of the main tube. The main tube, the objective system and the ocular system are cooperatively configured to define at least one focal plane. The viewing optic further includes a beam combiner located between the objective system and the first focal plane. The viewing optic further includes an integrated display system comprising an active display, wherein the active display generates and projects a

WHAT IS CLAIMED IS:

1. A system comprising: a viewing optic having (a) a main tube; (b) an objective lens system coupled to a first end of the main tube; (c) an ocular system coupled to a second end of the main tube, an erector lens system located between the objective lens system and the ocular lens system, a first focal plane between the objective lens system and the erector lens system, a beam combiner located between the objective lens system and the first focal plane, ~~an optical system configured to focus a target image from an outward scene to a first focal plane~~ and an active display configured to generate a digital image, and a round counter configured to track ammunition status and to communicate ammunition status to the active display; wherein the ammunition status is projected into the first focal plane of the viewing optic.

2. The system of Claim 1, wherein the round counter comprises a magazine follower with one or more magnets.

3. The system of Claim 2, wherein the system further comprises a firearm.

4. The system of Claim ~~2~~3, wherein the firearm comprises one or more magnetic sensors.

5. The system of Claim 4, wherein the one or more magnetic sensors are Hall-effect sensors configured to detect the magnetic field from the one or more magnets in the magazine follower.

6. The system of Claim 5. wherein the one or more Hall-effect sensors are in a magazine well.

7. The system of Claim 5, wherein the one or more Hall-effect sensors are on a receiver of the firearm.

8. The system of Claim 5, further comprising a processor to corelate position of the magnetic field with ammunition status.

9. The system of Claim 5, wherein the ammunition status is ~~the~~ a number of rounds in a magazine.

10. A system comprising: a viewing optic having: (a) a main tube; (b) an objective lens system coupled to a first end of the main tube that focuses a target image from an outward scene; (c) an ocular lens system coupled to ~~the~~ a second end of the main tube, (d) an erector lens system located between the objective lens system and the ocular lens system, (e) a first focal plane between the objective lens system and the erector lens system, (f) a beam combiner located between the objective lens system and the first focal plane~~the main tube, objective system and ocular system being configured to define at least a first focal plane~~; and (~~d~~g) an active display

configured to generate a digital image; and a round counter system comprising a magazine follower having one or more magnets inserted into a magazine and multiple magnetic sensors placed on a magwell, wherein an activated magnetic sensor corresponds to ~~the~~ a position of the magazine follower, and a processor configured to correlate the position of the magazine follower with ammunition status and to communicate with the active display, wherein the ammunition status is projected into the first focal plane of the viewing optic.

11. The system of Claim 10, wherein the magnetic sensors are Hall-effect sensors.

12. The system of Claim 10, wherein the magnetic sensors on the magwell are located in a remote control configured to communicate with the viewing optic.

13. The system of Claim 10, wherein the ammunition status indicates status of ~~the~~ rounds in the magazine or indicates a round in ~~the~~ a chamber or indicates a round in the magazine but an empty chamber.

14. The system of Claim 10, wherein the ammunition status is the number of rounds remaining in ~~a~~ the magazine.

~~15. A method comprising:~~

~~(a) moving a magazine follower with one or more magnets through a magazine;~~

~~(b) activating a magnetic sensor when the magazine follower is in proximity to said magnetic sensor;~~

~~(c) determining ammunition status based on position of the magazine follower as indicated by an activated magnetic sensor;~~

~~(d) communicating the ammunition status to an active display in a viewing optic;~~

~~(e) generating a digital image of the ammunition status using the active display; and~~

~~(f) projecting the digital image into the first focal plane of the viewing optic.~~

~~16. The method of Claim 15, wherein the magnetic sensor is located in a magazine well.~~

~~17. The method of Claim 15, wherein the magnetic sensor is located on a remote control configured to communicate with the viewing optic.~~

~~18. The method of Claim 15, wherein the magnetic sensor is a Hall-effect sensor.~~

~~19. The system of Claim 15, wherein the ammunition status indicates status of the rounds in the magazine or indicates there is a round in the chamber or indicates there is a round in the magazine and an empty chamber.~~

~~20. The method of Claim 15, wherein the ammunition status is the number of rounds in a magazine.~~

~~21. A system comprising~~

~~(a) a firearm having magnetic sensors on the receiver;~~

~~(b) a round counter system coupled to the firearm and having a magazine follower having one or more magnets inserted into a magazine; wherein one or more magnetic sensors detect the magnetic field as the magazine follower moves through the magazine; and further wherein the height of the magazine follower correlates with a number of rounds in the magazine; and~~

~~(c) viewing optic having an optical system configured to focus a target image from an outward scene to a first focal plane; wherein the active display projects the number of rounds in the magazine into the first focal plane of the viewing optic.~~

~~22. A system comprising:~~

~~(a) a round counter system having a magazine follower with one or more magnets, wherein as the magazine follower moves through the magazine, the magnet is positioned in front of one or more Hall-effect sensors on a circuit board;~~

~~(b) a processing unit configured to correlate the height of the magazine follower with the number of rounds remaining in the magazine; and~~

~~(c) a viewing optic having an optical system configured to focus a target image from an outward scene to a first focal plane; wherein the active display projects the number of rounds in the magazine into the first focal plane of the viewing optic.~~

~~23. A system comprising~~

~~a round counter system having a magazine follower having one or more magnets inserted into a magazine; wherein the magazine has one or more ferrous wires configured to detect the magnetic field as the magazine follower moves through the magazine and one or more nodes configured to communicate with one or more magnetic sensors; and further wherein the height of the magazine follower correlates with a number of rounds in the magazine; and~~

~~viewing optic having an optical system configured to focus a target image from an outward scene to a first focal plane; wherein the active display projects the number of rounds in the magazine into the first focal plane of the viewing optic.~~

~~24. A system comprising:~~

~~(a) a round counter system having a magazine follower with one or more magnets, and a magazine with one or more ferrous wires configured to detect a magnetic field;~~

~~(b) a processing unit configured to correlate height of the magazine follower based on activation of the ferrous wires with the number of rounds in the magazine; and~~

~~(c) a viewing optic having an optical system configured to focus a target image from an outward scene to a first focal plane; wherein the active display projects the number of rounds in the magazine into the first focal plane of the viewing optic.~~