CLAIMS

1. An early-warning system for steering of a two-wheeled vehicle, applied to the two-wheeled vehicle comprising a display apparatus, wherein the early-warning system comprises: a first control system and a second control system both operating independently and capable of exchanging data between each other in real time; wherein

the first control system is configured to:

monitor a steering state of the two-wheeled vehicle in real time and generate steering state data;

generate early-warning state data based on the steering state data;

transmit at least part of the steering state data and the early-warning state data to the second control system in real time; and

control corresponding components of the two-wheeled vehicle to operate according to control instructions received from the second control system and internal preset instructions;

the second control system is configured to:

receive the steering state data and the early-warning state data transmitted by the first control system;

generate early-warning information based on the early-warning state data; and

control a display of the display apparatus based on the steering state data and/or the early-warning information; and

the second control system is further configured to transmit at least one of the steering state data, the early-warning state data, and the early-warning information to a mobile terminal and/or a cloud server connected to the second control system.

2. The early-warning system for steering of a two-wheeled vehicle according to claim 1, wherein the first control system is connected to a steering switch and a turn signal provided on the two-wheeled vehicle, to control the turn signal to light up when a user turns on the steering switch.

3. The early-warning system for steering of a two-wheeled vehicle according to claim 1, wherein the second control system comprises a capturing apparatus for acquiring image information behind the two-wheeled vehicle and transmits the image information to the display apparatus.

4. The early-warning system for steering of a two-wheeled vehicle according to claim 1, wherein the first control system comprises a radar for acquiring radar wave signals behind the two-wheeled vehicle, and generates the early-warning state data based on the radar wave

signals.

5. The early-warning system for steering of a two-wheeled vehicle according to claim 4, wherein the early-warning information comprises early-warning levels, and the second control system controls the display of the display apparatus according to the early-warning levels.

6. The early-warning system for steering of a two-wheeled vehicle according to claim 5, wherein the two-wheeled vehicle further comprises an audio playback apparatus;

the second control system generates different early-warning audio according to the early-warning levels and transmits the early-warning audio to the audio playback apparatus.

7. The early-warning system for steering of a two-wheeled vehicle according to claim 6, wherein the early-warning system further comprises a helmet, and the second control system is further configured to transmit the early-warning information to the helmet connected to the two-wheeled vehicle.

8. The early-warning system for steering of a two-wheeled vehicle according to claim 7, wherein the helmet comprises at least one of a display unit, an audio playback unit and a light unit, and controls the display unit, the audio playback unit or the light unit to operate based on the early-warning information.

9. The early-warning system for steering of a two-wheeled vehicle according to claim 8, wherein the light unit comprises a plurality of lights presenting at least two colors, each of the at least two colors corresponds to an early-warning level, and the helmet controls a corresponding light to operate according to the early-warning level.

10. An early-warning method for steering of a two-wheeled vehicle, applied to the early-warning system for steering of the two-wheeled vehicle according to claim 1, comprising:

monitoring a steering state of the two-wheeled vehicle in real time and generating steering state data;

generating early-warning state data based on the steering state data;

generating early-warning information based on the early-warning state data and presenting the steering state data and/or the early-warning information to a user.

11. An early-warning apparatus for steering of a two-wheeled vehicle, applied to the early-warning system for steering of the two-wheeled vehicle according to claim 1, comprising:

a steering state monitoring module for monitoring a steering state of the two-wheeled vehicle in

real time and generating steering state data;

an early-warning state determination module for generating early-warning state data based on the steering state data;

an early-warning information generation module for generating early-warning information based on the early-warning state data; and

a presentation module for presenting the steering state data and/or the early-warning information to a user.

12. A two-wheeled vehicle, comprising a vehicle body and an early-warning system for steering, wherein the vehicle body comprises a display apparatus and the early-warning system for steering comprises a first control system and a second control system both operating independently and capable of exchanging data between each other in real time; wherein

the first control system is configured to:

monitor a steering state of the two-wheeled vehicle in real time and generate steering state data;

generate early-warning state data based on the steering state data;

transmit at least part of the steering state data and the early-warning state data to the second control system in real time; and

control corresponding components of the two-wheeled vehicle to operate according to control instructions received from the second control system and internal preset instructions;

the second control system is configured to:

receive the steering state data and the early-warning state data transmitted by the first control system;

generate early-warning information based on the early-warning state data; and

control a display of the display apparatus based on the steering state data and/or the early-warning information; and

the second control system is further configured to transmit at least one of the steering state data, the early-warning state data, and the early-warning information to a mobile terminal and/or a cloud server connected to the second control system.

13. A helmet, comprising a shell and a communication device provided within the shell, wherein the communication device is connected to a two-wheeled vehicle for receiving early-warning information transmitted by the two-wheeled vehicle and presenting the early-warning information

to a user, by the early-warning system according to claim 1.

14. An electronic device, comprising a processor and a memory storing a computer executable program, wherein the processor executes a method according to claim 10 when the computer program is executed by the processor.

15. A computer-readable storage medium storing one or more programs, wherein the one or more programs, when executed by the processor, implement the method according to claim 10.