CLAIMS

1. A vehicle control interface that is connected between an autonomous driving system and a vehicle platform configured to perform autonomous driving according to a command from the autonomous driving system, the vehicle control interface characterized by comprising:

a memory in which a program including a predetermined application programming interface (API) defined for each of signals is stored; and

a processor configured to perform interfacing between the autonomous driving system and the vehicle platform by executing the program, wherein:

the vehicle platform is configured to be activated in response to one of a first activation command and a second activation command;

the first activation command is a command transmitted from the autonomous driving system to the vehicle platform via the vehicle control interface;

the second activation command is a command in response to a manual operation on the vehicle platform; and

the processor is configured to, when the vehicle platform is activated in response to the first activation command, reduce effectiveness of the manual operation on the vehicle platform compared to when the vehicle platform is activated in response to the second activation command.

when the vehicle platform is activated in response to the second activation command, transition from a manual driving mode to an autonomous driving mode in response to an autonomous driving transition command from the autonomous driving system; and

when the vehicle platform is activated in response to the first activation command,

transition from the manual driving mode to a standby mode after executing an initial diagnosis of the vehicle platform,

maintain the standby mode until having received the autonomous driving transition command, and

transition from the standby mode to the autonomous driving mode upon receiving the autonomous driving transition command; and

the standby mode is a mode in which the vehicle platform renders traveling impossible.

2. The vehicle control interface according to claim 1, wherein the processor is configured to transition from the manual driving mode to the standby mode when a vehicle speed is zero and a shift position is a parking position in the manual driving mode.

3. The vehicle control interface according to any one of claims 1 to 2, wherein the standby mode is a mode that includes processing which disables a manual shift operation on the vehicle platform.

4. The vehicle control interface according to any one of claims 1 to 2, wherein the standby mode is a mode that includes processing which disables a manual accelerator operation on the vehicle platform.

5. The vehicle control interface according to any one of claims 1 to 2, wherein the standby mode is a mode that includes processing which disables a manual parking brake release operation on the vehicle platform.

6. The vehicle control interface according to any one of claims 1 to 2, wherein:

the vehicle platform includes an air conditioner or an audio system; and

the standby mode is a mode that includes processing which disables the manual operation on the air conditioner or the audio system.

7. A vehicle that is configured to be equipped with an autonomous driving system, the vehicle characterized by comprising:

a vehicle platform configured to perform autonomous driving according to a command from the autonomous driving system; and

a vehicle control interface configured to perform interfacing between the autonomous driving system and the vehicle platform by executing a predetermined application programming interface (API) defined for each of signals, wherein:

the vehicle platform is configured to be activated in response to one of a first activation command and a second activation command;

the first activation command is a command transmitted from the autonomous driving system to the vehicle platform via the vehicle control interface;

the second activation command is a command in response to a manual operation on the vehicle platform; and

the vehicle control interface is configured to, when the vehicle platform is activated in response to the first activation command, reduce effectiveness of the manual operation on the vehicle platform compared to when the vehicle platform is activated in response to the second activation command;

when the vehicle platform is activated in response to the second activation command, transition from a manual driving mode to an autonomous driving mode in response to an autonomous driving transition command from the autonomous driving system; and

when the vehicle platform is activated in response to the first activation command,

transition from the manual driving mode to a standby mode after executing an initial diagnosis of the vehicle platform,

maintain the standby mode until having received the autonomous driving transition command, and

transition from the standby mode to the autonomous driving mode upon receiving the autonomous driving transition command; and

the standby mode is a mode in which the vehicle platform renders traveling impossible.

8. A control method for a vehicle that is configured to be equipped with an autonomous driving system,

the vehicle including:

a vehicle platform configured to perform autonomous driving according to a command from the autonomous driving system; and

a vehicle control interface configured to perform interfacing between the autonomous driving system and the vehicle platform by executing a predetermined application programming interface (API) defined for each of signals,

the control method characterized by comprising:

activating the vehicle platform in response to one of a first activation command and a second activation command, the first activation command being a command transmitted from the autonomous driving system to the vehicle platform via the vehicle control interface, and the second activation command being a command in response to a manual operation on the vehicle platform; and

reducing effectiveness of the manual operation on the vehicle platform when the vehicle platform is activated in response to the first activation command as compared to when the vehicle platform is activated in response to the second activation command;

when the vehicle platform is activated in response to the second activation command, transition from a manual driving mode to an autonomous driving mode in response to an autonomous driving transition command from the autonomous driving system; and

when the vehicle platform is activated in response to the first activation command,

transition from the manual driving mode to a standby mode after executing an initial diagnosis of the vehicle platform,

maintain the standby mode until having received the autonomous driving transition command, and

transition from the standby mode to the autonomous driving mode upon receiving the autonomous driving transition command; and

the standby mode is a mode in which the vehicle platform renders traveling impossible.