A gaming peripheral for use during play of an electronic video game includes a board member and a rotational element extending from a bottom surface of the board member. The board member is rotatable about any of three mutually orthogonal axes, by a user standing on a top surface of the board member and applying a force to the rotational element which is contacting an opposing surface, such as the ground. The board member includes a rotation determination element for generating data representative of the rotation of the board member about any of the three axes. The rotational element and the rotation determination element can be disengaged by the board member, such that a conventional, standalone board member, for example, a skateboard, is readily convertible between the gaming peripheral and the standalone skateboard.
FIG. 7

- Convert standalone board into peripheral
- User stands on board, balancing on rotational element
- Game play commenced
- User input applied to peripheral
- User input processed
- Modify game play / adjust score based on user input
- Continue game play?
  - Yes: Continue game play
  - No: Convert peripheral into standalone board
GAMING PERIPHERAL INCLUDING ROTATIONAL ELEMENT

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of the filing date of U.S. Provisional Application No. 61/189,385 filed Aug. 19, 2008, the disclosure of which is hereby incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] Some peripherals for gaming software include motion sensing devices that transmit to a gaming console, information representative of rotation of the peripheral about an axis. For example, a peripheral having the configuration of a skateboard may be manipulated by a user to cause rotation of the skateboard about an axis, and data representative of the rotation of the peripheral is transmitted from the peripheral to the gaming console for use during play of a game on the gaming console.

[0003] In the prior art, board-shaped peripherals typically include a board fixedly mounted to a base unit, which is electronically hardwired to a gaming console. The user, when standing on the board, can cause the board to rotate in pitch or yaw, in accordance with play of a boarding game, such as a game involving skateboarding, wakeboarding, surfboarding, snowboarding, etc., on the console. The electronics in the peripheral detects the rotation of the board in pitch or yaw, and then transmits the rotation information over the hardwire connection to the game console.

[0004] The goal for gaming peripherals is to simulate, as closely as possible, real life events that may be part of a game, and also to be pleasing to, and provide for ease of use by, a user. In currently known board-shaped peripherals, however, the board is fixed to a base unit which is bulky and relatively large in size. The size of the base unit makes such peripheral more suitable and desirable for use in a gaming arcade, than in a home with a home gaming console. In addition to the relatively large size of prior art board-shaped peripherals, the requirement for a physical interconnection of the base units with the game console, and also the lack of any capability for the user to rotate the board in roll, as well as in yaw and pitch, during game play, limit the attractiveness of such board-shaped peripherals, and thus attractiveness of games that can be played with such board-shaped peripherals.

[0005] Therefore, there exists a need for a gaming peripheral having the shape of a board, such as a skateboard, which can be rotated in roll, yaw and pitch during play of a game, and also which is easily used by and pleasing to a user.

SUMMARY OF THE INVENTION

[0006] In accordance with one aspect of the invention, a gaming peripheral for operation with a game console includes a board extending lengthwise between opposing ends and including a top surface and a bottom surface; a rotational element extending from the bottom surface of the board and including a contact surface for contacting an opposing surface during play of a game on a console; and a controller unit. The controller unit includes a detector for detecting rotation of the board about any one of three mutually orthogonal axes. Rotation of the board is caused by applying a force to the board for moving a portion of the contact surface contacting the opposing surface in relation to the opposing surface, or for changing a portion of the contact surface contacting the opposing surface from a first portion of the contact surface to a second portion of the contact surface. The controller unit further includes a wireless communication unit for wirelessly transmitting data representative of the detected rotation to the game console during play of the game. In one embodiment, the rotational element desirably is detachably engageable to the bottom surface of the board.

[0007] In accordance with another aspect of the invention, a gaming peripheral for operation with a game console includes a board extending lengthwise between opposing ends and including a top surface and a bottom surface; a rotational element extending from the bottom surface of the board and including a contact surface for contacting an opposing surface during play of a game on the console; and a tracking element extending from the top surface of the board for use in tracking rotation of the board about any one of three mutually orthogonal axes. Rotation of the board is caused by applying a force to the board for moving a portion of the contact surface contacting the opposing surface in relation to the opposing surface, or for changing a portion of the contact surface contacting the opposing surface from a first portion of the contact surface to a second portion of the contact surface. In one embodiment, the tracking element is a tracking ball detachably engageable from the board and reflective of optical energy signals. In another embodiment, the tracking element is positioned adjacent to or at one of the ends of the board.

[0008] In accordance with another aspect of the invention, a method for playing a video game includes providing a gaming peripheral including a board having a top surface and a bottom surface. The bottom surface of the board includes a rotational element including a contact surface for contacting an opposing surface during play of the game. The peripheral further includes a rotation determination element for generating data representative of rotation of the board about any of three mutually perpendicular axes. The method further includes applying a force to the board for moving a portion of the contact surface contacting the opposing surface in relation to the opposing surface, or for changing a portion of the contact surface contacting the opposing surface from a first portion of the contact surface to a second portion of the contact surface, thereby causing the board to rotate about at least a first of the axes; generating rotation data representative of the rotation of the board about the at least first axis using the rotation determination element; and using the rotation data at a gaming unit during play of the video game.

[0009] In accordance with another aspect of the invention, a method for playing an electronic video game uses a skateboard having front and back wheel units disengageable engageable to a bottom surface of the skateboard. The method includes disengaging the front and back wheel units from the skateboard; engaging a rotational element to the skateboard at a location on the bottom surface of the skateboard at which the back wheel unit is engageable to the skateboard; engaging to the skateboard a controller unit having wireless communication capabilities and for detecting rotation of the skateboard about any of three mutually perpendicular axes; and during play of the game, wirelessly transmitting, from the controller unit, data representative of detected rotation of the skateboard about at least a first of the axes.

[0010] In accordance with still another aspect of the invention, a device for providing input to a game includes a board means having a bottom surface and a top surface; a rotational
means extending from the bottom surface of the board means and including a contact surface for contacting an opposing surface during play of a game; and means for determining rotation of the board about at least one of the axes. The board means is rotatable about any of three mutually perpendicular axes, by moving a portion of the contact surface of the rotation means contacting the opposing surface in relation to the opposing surface, or causing a portion of the contact surface of the rotational means contacting the opposing surface to change from a first portion of the contact surface to a second portion of the contact surface.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a system diagram in accordance with an aspect of the present invention.
[0012] FIGS. 2A and 2B are schematic, bottom and top views, respectively, of a board-shaped peripheral in accordance with an aspect of the present invention.
[0013] FIGS. 3A, 3B and 3C are perspective, front and top views, respectively, of a rotational element in accordance with an aspect of the present invention.
[0014] FIGS. 4A and 4B are perspective and front views, respectively, of a rotational element in accordance with another aspect of the present invention.
[0015] FIG. 5 is a schematic view of a skateboard-shaped peripheral in accordance with another aspect of the present invention.
[0016] FIG. 6 is a schematic view of a skateboard-shaped peripheral in accordance with another aspect of the present invention.
[0017] FIG. 7 is a flow chart in accordance with an aspect of the invention.
[0018] FIGS. 8A, 8B and 8C are perspective views of an exemplary board of a peripheral in accordance with an aspect of the invention.

DETAILED DESCRIPTION

[0019] As shown in FIG. 1, a system 10 in accordance with one aspect of the invention comprises a game console 12, a display 14, a peripheral 16 and other components typically present in game consoles. The system is used by a user.
[0020] The game console 12 preferably includes a processor 18 and memory 20. Memory 20 stores information accessible by processor 18, including instructions 22 for execution by the processor 18, and data 24 which is retrieved, manipulated or stored by the processor 18. The memory 20 may be of any type capable of storing information accessible by the processor, by way of example, hard-drives, ROM, RAM, CD-ROM, DVD, write-capable memories, and read-only memories.
[0021] The instructions 22 may comprise any set of instructions to be executed directly (e.g., machine code) or indirectly (e.g., scripts) by the processor 18. The terms “instructions,” “steps” and “programs” may be used interchangeably herein. The functions, methods and routines of the program in accordance with the present invention are explained in more detail below.
[0022] Data 24 may be retrieved, stored or modified by processor 18 in accordance with the instructions 22. The data 24 may be stored in any manner known to those of ordinary skill in the art such as in computer registers, in records contained in tables and relational databases, or in XML files. The data may also be formatted in any computer readable format such as, but not limited to, binary values, ASCII or EBCDIC (Extended Binary-Coded Decimal Interchange Code). Moreover, any information sufficient to identify the relevant data may be stored, such as descriptive text, proprietary codes, pointers, or information which is used by a function to calculate the relevant data.
[0023] Although the processor and memory are functionally illustrated in FIG. 1 as within the same block, it will be understood by those of ordinary skill in the art that the processor and memory may actually comprise multiple processors and memories that may or may not be stored within the same physical housing. For example, some of the instructions and data may be stored on a removable DVD, CD-ROM and others within a read-only computer chip. Some or all of the instructions and data may be stored in a location physically remote from, yet still accessible by, the processor. For example, some or all of the instructions may be downloaded or accessed over a network (not shown). Similarly, the processor may actually comprise a collection of processors which may or may not operate in parallel.
[0024] All or a portion of the instructions 22 may comprise game instructions 30, which may be specific to a particular game, such as a video game involving skateboarding, snowboarding, wakeboarding, surfboarding, etc.
[0025] As noted above, system 10 may comprise additional components typically found in a game console or computer system such as a display 14 (e.g., an LCD screen), microphone, modem (e.g., telephone or cable modem), camera, speakers, and all of the components used for connecting these elements to one another. Accordingly, the console is preferably capable of outputting audio and video signals for rendering by displays and speakers or the like. Game console 12 preferably communicates with the Internet via a modem or some other communication component such as a network card.
[0026] The game console may comprise a dedicated gaming system, such as a SONY PLAYSTATION. The game console may also comprise any device capable of processing instructions and transmitting data to and from humans and other computers or devices, including general purpose computers, network computers lacking local storage capability, PDA's with modems and Internet-capable wireless phones, digital video recorders, cable television set-top boxes or consumer electronic devices.
[0027] Peripheral 16 includes a board member 40 on which a user can stand, a rotational element 42 for contacting an opposing surface, such as the ground, when the user stands on the board member 40 and is playing a game, and elements for detecting user input 44.
[0028] The user input 44 can include a detector 46 for detecting rotation of the board member 40 about any one of three mutually perpendicular axes. The detector 46 can be an inertial sensing device, such as an accelerometer.
[0029] Referring to FIGS. 8A, 8B and 8C, which shows an exemplary embodiment of the board member 40 which can be used in a peripheral in accordance with one aspect of the invention, rotation of the board member 40 about any one of three mutually orthogonal axes x, y and z is caused by a user applying forces to the board member 40, with respect to an exemplary rotational element 130, while a portion of a contact element 133 of the rotational element 130 which is spaced from a bottom surface 40A of the board member 40 is maintained in contact with an opposing surface 70, such as the ground. The contact element 133 includes a substantially
planar portion 135 that is parallel to the bottom surface 40A of the board member 40, arcuate portions 137A, 137B extending away from opposite ends of the portion 135 and towards the bottom surface 40A, and anterior and posterior edges 129A, 129B. The board member 40, which extends lengthwise between a front end 60 and a back end 64, includes or is attached to the detector 46 (not shown in the Figure), which is desirably positioned at or adjacent the front end 60. The detector 46 desirably is positioned as far as possible from the rotational element 130 to maximize the accuracy with which the detector 46 can detect rotation of the board member 40 about any of the three mutually orthogonal axes x, y and z. The detector 46 generates data representative of the detected rotation of the board member 40 (i) about the z-axis or in yaw, where the movement of the board member 40 follows dashed line ZZ as shown in FIG. 8C; (ii) about the y-axis or in pitch, where the movement of the board member 40 follows dashed line YY as shown in FIG. 8A; and (iii) about the x-axis or in roll, where the movement of the board member 40 follows dashed line XX as shown in FIG. 8B. Referring to FIG. 8C, rotation of the board member 40 in yaw can occur when the portion of a surface of the contact element 133 contacting the opposing ground 70 remains substantially unchanged and is moved clockwise or counter-clockwise in relation to the ground 70. Referring to FIG. 8A, rotation of the board member 40 in pitch can occur by causing a transfer of the area of contact of the contact element 133 with the opposing ground 70 from a surface area of the portion 135 to the anterior edge 129A or the posterior edge 129B. Referring to FIG. 8B, rotation of the board member 40 in roll can occur by causing a transfer of the area of contact of the contact element 133 with the opposing ground 70 from a surface area of the portion 135 to a surface area of the portion 137A or the portion 137B.

[0030] Referring again to FIG. 1, the user input 44 may include buttons 48 on or attachable to the board member 40 that a user can depress during game play. The buttons 48 may be on the top surface, the bottom surface or both the top and bottom surfaces of the board member 40.

[0031] The peripheral 16 also includes a processor 50 for receiving and processing signals from the other elements, such as the input buttons 48 and the detector 46. It will be understood that the processor 50 may also comprise a controller for relaying, such as wirelessly to the console 12, and transmitting as necessary, signals from the buttons 48 and the detector 46.

[0032] The peripheral 16 is in communication with the console 12 via a communication link 60, which desirably is wireless or, alternatively, may be wired.

[0033] In one aspect of the invention, the rotational element 42 is detachably engageable from the bottom surface of the board member 40. Alternatively, the rotational element 42 is permanently fixed to the bottom surface of, or integrated into, the board member 40.

[0034] In another aspect of the invention, the user input 44 and the processor 50 are combined into a single controller unit that is detachably engageable from the board member 40. In one embodiment, the processor 50, the input buttons 48 and the detector 46 are integrated into a single wireless component, such as existing in the SONY PS3 Six Axis Controller, which is detachably engageable from the top or bottom surface of the board member 40. In another embodiment, one or more of the processor 50, the input buttons 48 and the detector 46 are integrated into, or permanently fixed to, the board member 40.

[0035] FIGS. 2A and 2B illustrate an exemplary peripheral 100 in accordance with an aspect of the current invention. The peripheral 100 includes a board 140 having a bottom surface 142, a top surface 144, a front end 160, a back end 164 and sides 162. The board 140 desirably is a standalone skateboard including front and back wheel units (not shown) engageable to the bottom surface 142 at threaded apertures 147 and 148, respectively. The apertures 148, which are closer to the end 164 than the end 160 of the board 140, desirably are sized and spaced from one another to match the size and spacing, respectively, of apertures of a standard back wheel unit which is attachable to a conventional, standalone skateboard.

[0036] The peripheral 100 further includes the rotational element 130, as described above in the text accompanying the description of FIGS. 8A, 8B, and 8C, which is capable of being engaged with, or disengaged from, the bottom surface 142 of the board 142. Further referring to FIGS. 3A, 3B and 3C, in one embodiment the rotational element 130, which desirably is made from metal or a heavy duty plastic, includes a mounting base 131 including apertures 136 extending there-through, and a post 132 interconnecting the base 131 to the contact element 133. The contact element 133 extends lengthwise between ends 138 and 139. The apertures 136 are desirably sized and spaced to correspond to the size and spacing, respectively, of the apertures 148 in the bottom surface 142 of the board 140.

[0037] In a further embodiment, at least a portion of outer surface 134 of the contact element 133 desirably is covered with or formed from a layer of rubber material, such as PLASTI-DIP, to provide a cushioned area that avoids the contact element 133 from damaging an opposing surface, such as flooring of a home, when the peripheral 100 is used with rotation element 130. In another embodiment, protective cushioning material, such as made of rubber, is configured, such as in the form of a shoe, to be fittable over the contact element 133 so as to encase the contact element 133.

[0038] To engage the element 130 with the board 140, the base 131 is positioned facing and over the bottom surface 142 of the board 140, and the lengthwise dimension of the contact element 133 extending between the ends 138 and 139 is arranged perpendicular to the dimension of the board 140 extending between the front and back ends 160, 164. The apertures 148 in the bottom surface 142 are then aligned with the corresponding apertures 136 in the base 131 of the rotational element 130. The same screws as used to secure the back wheel unit to the board 140 desirably may be used to engage the rotational element 130 to the board 140, at the respectively aligned apertures 136, 148. Disengagement of the rotational element 130 from the board 140 is simply achieved by removing the screws from the apertures 136, 148.

[0039] In one embodiment, the portion 135 of the contact element 133, which is opposite the base, is substantially planar and also co-extensive with the base 131. The planar portion 135 preferably has a width of about one inch and a length of about one and one-half inches. In addition, the arcuate portions 137A, 137B of the contact element 133 extend away from opposite ends of the portion 135 and towards the base 131. The portions 137A, 137B have a length and curvature, such that the portions 137A, 137B terminate at the respective end portions 138, 139 adjacent the sides 162 of the board 140.
In addition, the peripheral includes a controller unit having wireless communication capabilities and including the input buttons, the detector and the processor. The controller unit includes an attachment unit that the user can operate to engage the controller unit to, or disengage the controller unit from, the board. The controller unit may be engaged to the top surface of the board, as shown in FIG. 2B. Alternatively, the controller unit may be engaged to the bottom surface, so as to provide that the user can place his feet anywhere on the entirety of the top surface during play.

In one embodiment, the attachment unit is a resilient or adjustable clip that can be slid over the end of the board, and then be adjusted so as to secure the controller unit to the opposite sides of the board adjacent the end. As desired, the attachment unit may be manipulated by the user to disengage the controller unit from the board, such as when the user desires to use the board as a conventional skateboard.

Further referring to FIG. 7, an operation in accordance with a variety of aspects of the invention will now be described with reference to the exemplary peripheral as illustrated in FIGS. 2A and 2B. A user initially converts the board, which desirably constitutes a conventional standalone skateboard, into the peripheral board, before game play on the console is commenced. To perform the conversion, the user removes the screws that secure the front wheel unit of the skateboard (not shown) to the top surface at the apertures, and the screws securing the back wheel unit to the bottom surface at the apertures. The rotational element is then positioned so that the longer dimensions of the contact element contacting the ground are perpendicular to each other and the apertures are aligned with corresponding apertures. The same screws that were removed from the board when engaging the back wheel units from the board are then threaded through the aligned apertures to engage the rotational element to the bottom surface of the board. Then, the user manipulates the attachment unit to engage the controller unit to the top surface of the board, such that the buttons face away from the top surface. The board, including the engaged rotational element and the engaged controller unit, now constitutes the peripheral, and is ready for use during play of a video game including a board, such as game simulating a player riding a skateboard. Alternatively, the peripheral including the board may be used during play of a game involving a surfboard, snowboard, wakeboard, or like boards.

To play the game, the board is placed with the top surface facing the user and a portion of the contact element contacting the opposing ground or floor. The user then places one foot on a portion of the top surface adjacent the back end and his other foot on a portion of the top surface between the end and the rotational element. The planar portion of the contact element provides that the user can, with relative ease, stand on the board and maintain the board balanced and stable on the rotational element, such that the user is in contact with the ground. After the user is standing on the board, the board is balanced on the rotational element, the user begins game play.

During game play, the user can shift his weight on the board in relation to the rotational element, so as to apply various forces on the board. The applied forces may cause the portion of the contact element contacting the ground to remain in contact with the ground while moving in relation to the ground, such that the board rotates in yaw, similarly as discussed above and illustrated in FIG. 8C for the board member. Alternatively, the applied forces may cause a portion of the contact element contacting the ground to change from a first portion to a second portion, such that the board rotates in pitch or roll, or both pitch and roll, similarly as discussed above and illustrated in FIGS. 8A and 8B for the board member. Depending on how the user shifts his weight on the board in relation to the rotational element and, in particular, to the portion of the contact element contacting the ground, the board may be caused to rotate in yaw, pitch or roll, or in any combination thereof. The detector detects the rotation of the board in yaw, pitch and roll during game play, and the controller unit wirelessly transmits data representative of the detected rotation to the console.

In addition, during game play, the user, who is standing on the board, may reach down with his hand and depress the button(s), for example, to complete a boarding maneuver indicated on the display as providing bonus points. The controller unit wirelessly transmits data representative of the user contacting the button(s) to the console during game play.

Depending on the user input received from the peripheral, the console modifies or adjusts game play. For example, if the detected rotation of the board corresponds to a special rotation, for example, a rotation in yaw, performed within a predetermined time interval during play of a game, the console awards bonus points to the user or suitably alters game play. Similarly, if the console determines that the input button was depressed at a particular time during game play, the console awards bonus points to the user or suitably alters game play. The console continues to process user input applied to the peripheral as long as a game is being played.

Once game play has ended, or the user no longer desires to play a game, if the user desires to use the board as a conventional skateboard, the user simply removes the screws attaching the rotational element to the board, opens the attachment unit to disengage the controller unit from the board, and then reattaches the front wheel and back wheel units to the top surface. The board is now ready for use as a conventional standalone skateboard by the user.

In another aspect of the invention, the user input can include a tracking element which can be used in conjunction with a camera system to determine the rotation of the board. The tracking element, for example, may be tracking ball having a surface reflective of optical energy signals which is attached to the top surface of the board or adjacent the end. Optical energy signals that are reflected from the tracking element during game play can be detected, such as by a camera system, and then processed for generating data representative of the rotation of the board. In an alternative embodiment, the tracking element is a part of the top surface of the board.

In a further embodiment, the controller unit includes a protective covering or casing, which protects the components in the unit from becoming damaged based on contact with the ground or a user’s foot during game play.
In another aspect of the invention, referring to FIGS. 4A and 4B, a rotational element 200 is a solid block of material, such as wood or plastic, including an arcurate contact portion 202 for contacting the ground, and a surface 204 opposite the contact portion 202 for attachment to the bottom surface of a board. In one embodiment, the contact portion 202 has the configuration of a half-sphere. The surface 204 can be attached to the bottom surface of a board member, such as by use of an adhesive. Alternatively, other conventional devices for disengageable engagement of two elements to each other, such as mateable elements, can be used to provide that the surface 204 of the rotational element 200 can be readily engaged with, and disengaged from, the bottom surface of the board member.

In another aspect of the invention, conventional disengageable engagement devices, such as mateable elements, also can be attached to or included in the controller unit 150 and a surface of a board to provide that the controller unit 150 is engageable with, and disengageable from, a board by a user, with relative ease.

FIG. 5 illustrates a peripheral 300 in accordance with another aspect of the present invention. The peripheral 300 includes a board 302 on which a user can stand and which the user can cause to rotate about any of three mutually perpendicular axes, such that the board 302 can rotate in yaw, pitch and roll. The peripheral 300 further includes a gear box unit 304 mounted on a base 306. The gear box unit 304 is coupled to a bottom surface 308 of the board 302 and includes gears coupled to electronics that are operable to selectively control when and how the board 302 can be moved by the user. The gear box unit 304, in one embodiment, includes a processor acting as a controller unit for the peripheral 300. Based on control signals received at the peripheral 300 from the console 12 during game play, the gear box unit 304 permits certain rotation of the board 302 at certain times during game play, so as to control when the user can cause the board 302 to rotate in yaw, roll or pitch. A controller unit 150 engaged with the board 302, similarly as in the peripheral 100, transmits to the console 12 data representative of detected rotation, and also depression of the input buttons 48 by the user, during game play.

FIG. 6 illustrates a peripheral 400 according to another aspect of the invention. The peripheral 400 includes a board 402 having a front end 413, a back end 415 and a top surface 411. The bottom surface of the board 402 is fixed to a fabric sheet 403 of a trampoline 404 on which a user would stand during conventional use of the trampoline 404. The board 402 is engaged to the sheet 403 at portions 407 and 409 of the bottom surface of the board 402. The board 402 desirably has the shape of a conventional skateboard and the portions 407, 409 correspond to the locations on a conventional skateboard at which front and back wheel units (not shown) ordinarily are attached to the skateboard. The detector 46, the input buttons 48 and the processor 50 are integrated into the top surface 411 of the board 402 adjacent the front end 413 of the board 402. Similarly as described above for the other peripherals, user input, such as causing the board 404 to rotate in yaw, pitch or roll, is detected by the detector 46, and the representative of the detected rotation is transmitted from the peripheral 400 to a game console during game play.

Although the invention herein has been described with reference to particular embodiments, it is to be understood that these embodiments are merely illustrative of the principles and applications of the present invention. It is therefore to be understood that numerous modifications may be made to the illustrative embodiments and that other arrangements may be devised without departing from the spirit and scope of the present invention as defined by the appended claims.

1. A gaming peripheral for operation with a game console, the peripheral comprising:
   a board extending lengthwise between opposing ends and including a top surface and a bottom surface;
   a rotational element extending from the bottom surface of the board and including a contact surface for contacting an opposing surface during play of a game on a console; and
   a controller unit including:
   a detector for detecting rotation of the board about any one of three mutually orthogonal axes, wherein the rotation of the board is caused by applying a force to the board for moving a portion of the contact surface contacting the opposing surface in relation to the opposing surface or for changing a portion of the contact surface contacting the opposing surface from a first portion of the contact surface to a second portion of the contact surface; and
   a wireless communication unit for wirelessly transmitting data representative of the detected rotation to the game console during play of the game.

2. The gaming peripheral of claim 1, wherein the rotational element is detachably engageable to the bottom surface of the board.

3. The gaming peripheral of claim 2, wherein the bottom surface of the board defines threaded apertures and the rotational element defines apertures alignable, respectively, with the apertures in the bottom surface of the board, wherein the rotational element is engageable with the board by alignment of the apertures of the board with the corresponding apertures of the rotational element.

4. The gaming peripheral of claim 3, wherein the board is a standalone skateboard engageable to a wheel unit defining apertures for receiving screws for securing the wheel unit to the board at the apertures in the bottom surface of the board, wherein the apertures in the rotational element have a spacing configuration matching a spacing configuration of the apertures in the wheel unit.

5. The gaming peripheral of claim 2, wherein the bottom surface of the board includes a first mating element and the rotational element includes a second mating element, wherein the first mating element is detachably mateable with the second mating element.

6. The gaming peripheral of claim 1, wherein the controller unit is detachably engageable to the board.

7. The gaming peripheral of claim 6, wherein the controller unit includes a first mating element for detachably mating with a second mating element on the top or bottom surface of the board.

8. The gaming peripheral of claim 1, wherein the controller unit includes an input button for receiving user input, wherein the wireless unit is for transmitting data representative of the received user input to the game console during play of the game.

9. The gaming peripheral of claim 1, wherein the board is shaped as a skateboard.

10. The gaming peripheral of claim 1, wherein the contact surface of the rotational element has an arcurate shape.
11. The gaming peripheral of claim 10, wherein the contact surface of the rotational element includes a substantially planar portion.

12. The gaming peripheral of claim 1, wherein the detector is positioned adjacent to or at one of the ends of the board.

13. The gaming peripheral of claim 1, wherein the controller unit extends from the bottom surface of the board.

14. The gaming peripheral of claim 1, wherein the controller unit includes a protective covering.

15. A gaming peripheral for operation with a game console, the peripheral comprising:
   - a board extending lengthwise between opposing ends and including a top surface and a bottom surface;
   - a rotational element extending from the bottom surface of the board and including a contact surface for contacting an opposing surface during play of a game on the console; and
   - a tracking element extending from the top surface of the board for use in tracking rotation of the board about any one of three mutually orthogonal axes, wherein the rotation of the board is caused by applying a force to the board for moving a portion of the contact surface contacting the opposing surface in relation to the opposing surface or for changing a portion of the contact surface contacting the opposing surface from a first portion of the contact surface to a second portion of the contact surface.

16. The gaming peripheral of claim 15, wherein the tracking element is a tracking ball detachably engageable from the board and reflective of optical energy signals.

17. The gaming peripheral of claim 15, wherein the tracking element is positioned adjacent to or at one of the ends of the board.

18. A method for playing a video game comprising:
   - providing a gaming peripheral including a board having a top surface and a bottom surface, wherein the bottom surface includes a rotational element including a contact surface for contacting an opposing surface during play of the game, wherein the peripheral includes a rotation determination element for generating data representative of rotation of the board about any of three mutually perpendicular axes;
   - applying a force to the board for moving a portion of the contact surface contacting the opposing surface in relation to the opposing surface or for changing a portion of the contact surface contacting the opposing surface from a first portion of the contact surface to a second portion of the contact surface, thereby causing the board to rotate about at least a first of the axes;
   - generating rotation data representative of the rotation of the board about the first axis using the rotation determination element; and
   - using the rotation data at a gaming unit during play of the video game.

19. The method of claim 18, wherein the rotation determination unit includes an accelerometer unit for generating the rotation data, the method further comprising:
   - wirelessly transmitting the rotation data to the gaming unit.

20. The method of claim 18, wherein the rotation determination unit includes a tracking element for reflecting optical energy signals, wherein the rotation data is generated based on the reflected optical energy signals.

21. The method of claim 18 further comprising:
   - determining at the gaming unit, based on the rotation data, whether the rotation of the board corresponds to a predetermined activity; and
   - modifying play of the game at the gaming unit based on the determination.

22. The method of claim 18, wherein the board includes a user contact input element, the method further comprising:
   - detecting a user contacting the input element during play of the game; and
   - wirelessly transmitting data representative of the detected user contact with the input element to the gaming unit.

23. A method for playing an electronic video game using a skateboard, wherein the skateboard includes front and back wheel units disengageably engageable to a bottom surface of the skateboard, the method comprising:
   - disengaging the front and back wheel units from the skateboard;
   - engaging a rotational element to the skateboard at a location on the bottom surface of the skateboard at which the back wheel unit is engageable to the skateboard;
   - engaging to the skateboard a controller unit having wireless communication capabilities and for detecting rotation of the skateboard about any of three mutually perpendicular axes; and
   - during play of the game, wirelessly transmitting, from the controller unit, data representative of detected rotation of the skateboard about at least a first of the axes.

24. The method of claim 23 further comprising:
   - after play of the game, disengaging the rotational element and the controller unit from the skateboard.

25. A device for providing input to a game comprising:
   - a board means having a bottom surface and a top surface;
   - a rotational means extending from the bottom surface of the board means and including a contact surface for contacting an opposing surface during play of a game, wherein the board means is rotateable about any of three mutually perpendicular axes, by moving a portion of the contact surface contacting the opposing surface to change from a first portion of the contact surface to a second portion of the contact surface; and
   - means for determining rotation of the board about at least one of the axes.

26. The device of claim 25, wherein the rotational means is disengageable from the board means.

27. The device of claim 20, wherein the rotation determination means is disengageable from the board means.

* * * * *