Wii Balance Board Accessory Guidelines

Version 1.10

The content of this document is highly confidential and should be handled accordingly.

RVL-06-0344-001-A
Released: March 26, 2008

Confidential

Table of Contents

Tables

Revision History

Version	Revision Date	Description
1.10	2008/02/06	• Added a note to perform a check to section 2.2 Load Restrictions [Required]. • Changed level of importance for section 2.3 Operation Restrictions to [Required]. • In section 2.3 Operation Restrictions [Required], separated out the warning sentence for the user, and created section 2.4 Operation Method User Warnings [Recommended]. • Changed “Threshold Value to Determine Stepping On and Off” to section 2.5 Threshold Value for Stepping On and Off After Setting the Zero Point [Required]. • In section 2.6 Preparation for Accurate Weight Load Measurement [Required], added a method to check for an unloaded state using the `WBCRead` function. • In section 2.10 Processing for Insufficient Remaining Battery Power [Required], added notes to check the remaining battery power. • Added a note, “Refer to the Programming Manual for details,” to section 2.11 Fault Check Mode [Required]. • Standardized zero-point notation.
1.00	2007/12/14	Initial version.

1 Overview

This document summarizes the guideline items that must be followed by applications supporting the Wii Balance Board accessory.

In particular, when developing a Japanese language version of an application, you must observe the content in section 2.12 [Japanese Version Only] Compliance with the Measurement Law [Required] to comply with the Measurement Law in Japan.

1.1 Level of Importance

The following levels indicate the importance of the individual programming guidelines.

[Required] Items that must be implemented

[Recommended] Items that should be implemented

In addition, related items may be marked as [Information].

1.2 Notes for the Wii Balance Board Accessory Guidelines

This document was established to reduce problems in the market. However, following these guidelines does not guarantee that all problems will be avoided.

1.3 Do Not Use Wii Development and SDK Files on Other Platforms

Do not use the files included in the various Wii console SDKs and development tools on other platforms.

2 Wii Balance Board Accessory

2.1 Disconnection Processing for the Wii Remote Controller [Required]

Disconnect the Wii Remote on 4P before connecting the Wii Balance Board accessory.

Without this disconnection, the Wii Balance Board accessory cannot be connected.

2.2 Load Restrictions [Required]

To prevent users that exceed 150 kg (330 lbs) in weight from using the Wii Balance Board accessory, display a message similar to “The applied load exceeds the allowable range.” and do not continue until it has been confirmed that the load is 150 kg (330 lbs) or less. Always check the load limit at the same time as the user’s weight after setting the zero point.

The Wii Balance Board accessory is designed for the maximum static weight of 300 kg (661 lbs). As a result, it is conceivable that users whose weight exceeds 150 kg (330 lbs) may apply a load that exceeds this expectation.

2.3 Operation Restrictions [Required]

To ensure safety, do not ask users to perform the following types of actions on the Wii Balance Board accessory.

- Jump
- Run
- Stand on the edge of the Wii Balance Board accessory
- Step on with other people at the same time
- Perform motions that can easily result in a loss of balance

2.4 Operation Method User Warnings [Recommended]

For example, for a game in which a user may unconsciously be inclined to jump, display a message in advance to the effect that jumping is not permitted, treat an excessive drop in the load as a jump and cease game progress, or take some other similar action. Take similar measures if you are concerned that the user may perform some action, other than a jump, for which their safety cannot be ensured.

2.5 Threshold Value for Stepping On and Off After Setting the Zero Point [Required]

After setting the zero point, use a load of 2 kg (4 lbs) or greater as the threshold value to determine when a user has stepped onto and off of the Wii Balance Board accessory. This value does not depend on the weight of the user.

2.6 Preparation for Accurate Load Measurement [Required]

Immediately before performing an accurate weight measurement (for example, in order to display the weight), always display a message that prompts the user to step off of the Wii Balance Board accessory.

Next, do the following.

1. Call the WBCRead function to confirm that the user has stepped off of the Wii Balance Board accessory.
2. Execute the temperature update command to set the zero point and to correct the weight value.
3. Display a message that prompts the user to step onto the Wii Balance Board accessory.

For details, see the *Function Reference Manual*.

2.7 Time Required for Accurate Load Measurement [Required]

When precisely measuring a load (for example, in order to display a weight), allow two seconds respectively for zero-point correction and for load measurement.

The accuracy of the Wii Balance Board accessory measurement is guaranteed by taking the average value over two seconds.

2.8 Time Restrictions for Accurate Load Measurement [Required]

When precisely measuring a load (for example, in order to display a weight), prompt the user to take the measurement within 10 seconds of the zero-point correction that immediately precedes it.

If 10 seconds have passed, either cancel the measurement or repeat the measurement process.

2.9 Use of the HOME Menu with Wii Balance Board Accessory Support [Required]

Use the HOME Menu that supports the Wii Balance Board accessory.

2.10 Processing for Insufficient Remaining Battery Power [Required]

When the remaining battery power obtained with the `WBCGetBatteryLevel` function is `0`, prompt the user to replace the batteries.

Specifically, display the message “Replace the Wii Balance Board batteries” on the screen and do not continue until the user has replaced the batteries.

Check the remaining battery power during each frame. The reason for this is that the `WPADRead` function will always return a value of 0 for `press` when the remaining battery power obtained by the `WBCGetBatteryLevel` function becomes 0, and Wii Balance Board operations will become impossible.

2.11 Troubleshooting Mode [Required]

Implement a fault check mode for the Wii Balance Board accessory.

This is to allow the user to confirm that the Wii Balance Board accessory is operating properly.

The fault check mode will confirm that each of the four Wii Balance Board sensors can obtain measurement values. If even one measurement value cannot be obtained, an error will be displayed to the user. For details, see the *Wii Balance Board Accessory Programming Manual*.

2.12 [Japanese Version Only] Compliance with the Measurement Law [Required]

2.12.1 Display Based on Guaranteed Accuracy

It is prohibited to display load figures onscreen with a greater degree of accuracy than the content of the Weight Display section that is published as a specification in the *Wii Balance Board Accessory Operations Manual*.

The units that can be used in the display vary according to the load, as described below.

Table 2-1 Usable Display Units

Load	Units
0-100 kg (0-220 lbs)	500 g (1 lb)
100-136 kg (220-300 lbs)	1 kg (2 lbs)

For example, it is not permitted to display 62.1 kg (136.9 lbs).

However, just as for a scale with an analog display, it is acceptable to use a scale with tick marks every 500 g (1 lb) for loads up to 100 kg (220 lbs), and to show the load by indicating a level in between two tick marks.

2.12.2 Weight Display Restrictions

For games that are intended for the Japanese market, do not display the weight when a load that exceeds 136 kg (300 lbs) is applied. For games that are intended for the North American and European markets, do not display the weight when a load that exceeds 150kg (330 lbs) is applied.