

Wii U

System Font Specifications

2013/02/13

Version 1.0

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and should be handled accordingly.**

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1 Introduction

This document describes specifications and cautionary notes concerning the scalable fonts that are built into the Wii U console. It is intended for Wii U application developers and planners.

1.1 Overview of Each Chapter

This document covers the following kinds of information.

- Chapter 2 Font Specifications

This chapter describes the types of fonts that are built into the Wii U and the font specifications for each region. Refer to this chapter if you would like to know about font names, character sets included in fonts, and font file formats.

- Chapter 3 Introduction to Nintendo Extended Characters and Cautionary Notes

This chapter describes the proprietary Nintendo pictographs, called Nintendo extended characters, that are included in system fonts. Nintendo extended characters are comprised of pictographs that represent various parts of the console, such as physical buttons and specific features. Refer to this chapter if you would like to know which Nintendo extended character to use for a specific physical button, and for cautionary notes on the use of specific Nintendo extended characters.

- Chapter 4 Other Information

Refer to this chapter if you would like to know about kerning, character width, compatibility with Nintendo 3DS system fonts, and copyright notices.

1.2 Associated Data

This document pertains to the data described in the table below.

Note: The filename of the system font for each language replaces FontName in the Field column.

Table 1-1 List of Associated Data

Field	Description
<i>FontName.pdf</i>	This file displays a list of the characters included in the font.
<i>FontName.xlor</i>	This is a configuration file for displaying the font. It defines the number of horizontal characters, the number of vertical characters, and the order in which characters are drawn. It is called the character order file. This file is used to specify which characters to convert to a bitmap font when using FontConverter in NW4F.
<i>FontName_Need.xlor</i>	This is a character order file that includes the minimum characters required for a Wii U system font. Specifically, it contains all characters of the Nintendo 3DS system bitmap font, along with specific characters Nintendo believes to be essential for the Wii U. This file is used to specify which characters to convert to a bitmap font when using FontConverter in NW4F.
<i>FontName.xml</i>	This XML data is for checking character width and kerning.

These associated data files are located in the SDK package that contains this document. Refer to the data files as you read through this document.

2 Font Specifications

Wii U has the following four types of system fonts.

- nintendo_NTLG-DB_002 ("NTLG"), which supports Japanese, American, and European languages
- nintendo_HeiTiW5_002 ("HeiTi"), which mainly includes the simplified characters used in China
- nintendo_HeiMedium-B5_002 ("HeiMedium"), which mainly includes the traditional characters used in Taiwan
- nintendo_Tae-Gothic_002 ("Tae-Gothic"), which mainly includes the Hangeul characters used in the Korean language

The main difference between these four types of system fonts is the ideographs that are included.

NTLG includes ideographs for the Japanese language, while HeiTi includes those for Simplified Chinese, HeiMedium includes those for Traditional Chinese, and Tae-Gothic includes those for the Korean language along with Hangeul characters. ASCII characters, European characters, Hiragana, Katakana, and Nintendo extended characters are included in all four system font types. Certain symbols are also included in all four font types. For more information, see the included character sets described later in the document.

Be sure to refer to chapter 3 Introduction to Nintendo Extended Characters and Cautionary Notes when using Nintendo extended characters.

The console includes all four types of system fonts regardless of its region setting. These fonts are accessible to all applications. A dedicated library is provided for font rendering.

The system fonts are included with the Cafe-SDK and NW4F.

2.1 Font File Format

The provided system fonts are now scalable fonts. They use a `.bfttf` data format that is specific to the Wii U. The system fonts do not include bitmap fonts.

2.1.1 Definition of Scalable Font

A scalable font is a font format that can be enlarged and reduced without loss of quality.

Scalable fonts only contain an outline of each character. When the characters are drawn, the system generates character image data (bitmap) from the outline information. Because outline information is more compact than image data (the difference is particularly pronounced for large character sizes), a greater variety of characters can be displayed with less memory. This technique is effective when displaying content that cannot be predicted in advance, such as a friend list that was downloaded over the network.

It also lets you create the optimum bitmap for the size of character being displayed, ensuring that the characters appear sharp instead of blurry.

2.1.2 Definition of BFTTF

This is a font in a data format that was created specifically for the Wii U. It cannot be installed on a PC.

2.1.3 Definition of Bitmap Font

This is a font format where character image data (bitmap) of a specific size is created in advance (pre-drawn) and images of the required characters are extracted for use. This format is widely used in game development and was historically provided with NintendoWare.

The Wii U no longer provides system fonts in the bitmap format, but such fonts can be created by converting a BFTTF font. To convert a BFTTF font, use the FontConverter tool included with the font library.

2.2 Japanese, American, and European Characters

The system font that supports Japanese, American and European languages is nintendo_NTLG-DB_002. This font is used for system menus, the software keyboard, and the error viewer for systems in the Japan, American, and European regions. Nintendo recommends using this font unless there is a particular reason to do otherwise. See *nintendo_NTLG-DB_002.pdf* for a list of characters included in the font.

Table 2-1 Specifications: nintendo_NTLG-DB_002

Included Character Sets	Supported Languages
<p>A total of 8,504 characters are included from the following character sets:</p> <ul style="list-style-type: none"> • ASCII 95 • CP1252 • CP1253 • ISO 8859-1 (Latin-1) • ISO 8859-7 • JIS X 0201 • JIS X 0208 • Nintendo extended characters 	<ul style="list-style-type: none"> • Japanese • English (North America and Europe) • French (Europe and Canada) • Spanish (Europe and Latin America) • Portuguese (Europe and Brazil) • German • Italian • Dutch • Russian • Greek • Swedish • Finnish • Norwegian • Danish • Czech • Hungarian • Polish • Turkish • Irish • Icelandic • Estonian • Latvian • Lithuanian • Slovak • Slovene • Maltese • Bulgarian • Romanian

Figure 2-1 Character Samples: nintendo_NTLG-DB_002

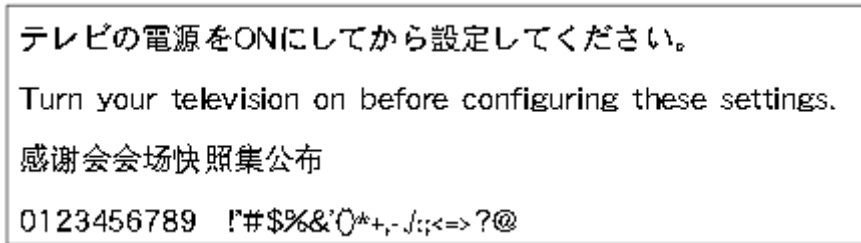
テレビの電源をONにしてから設定してください。
 Turn your television on before configuring these
 settings.
 0123456789 !"#\$%&'()*+,-./:;<=>?@

2.3 Simplified Chinese

The system font that supports Simplified Chinese is called nintendo_HeiTiW5_002. See *nintendo_HeiTiW5_002.pdf* for a list of characters included in the font.

Table 2-2 Specifications: nintendo_HeiTiW5_002

Included Character Sets	Supported Languages
<p>A total of 29,041 characters are included from the following character sets:</p> <ul style="list-style-type: none"> • ASCII 95 • CP1252 • ISO 8859-1 (Latin-1) • CP1253 + ISO 8859-7 • Fullwidth ASCII 94 • Symbols for compatibility with Japanese/North American/European fonts • Hirakana Katakana 169 • Hanzi Common Level 1 • Hanzi Common Level 2 • GB2312 • GB18030-2000 • Nintendo extended characters 	<ul style="list-style-type: none"> • Simplified Chinese • English (North America and Europe) • French (Europe and Canada) • Spanish (Europe and Latin America) • Portuguese (Europe and Brazil) • German • Italian • Dutch • Russian • Greek • Swedish • Finnish • Norwegian • Danish • Czech • Hungarian • Polish • Turkish • Irish • Icelandic • Estonian • Latvian • Lithuanian • Slovak • Slovene • Maltese • Bulgarian • Romanian

Figure 2-2 Character Samples: nintendo_HeiTiW5_002

2.4 Traditional Chinese

The system font that supports Traditional Chinese is called `nintendo_HeiMedium-B5_002`. See [nintendo_HeiMedium-B5_002.pdf](#) for a list of characters included in the font.

Table 2-3 Specifications: nintendo_HeiMedium-B5_002

Included Character Sets	Supported Languages
<p>A total of 15,086 characters are included from the following character sets:</p> <ul style="list-style-type: none"> • ASCII 95 • CP1252 • ISO 8859-1 (Latin-1) • CP1253 + ISO 8859-7 • Fullwidth ASCII 94 • Symbols for compatibility with Japanese/North American/European fonts • Hirakana Katakana 169 • Big5 • CP950 • Nintendo extended characters 	<ul style="list-style-type: none"> • Traditional Chinese • English (North America and Europe) • French (Europe and Canada) • Spanish (Europe and Latin America) • Portuguese (Europe and Brazil) • German • Italian • Dutch • Russian • Greek • Swedish • Finnish • Norwegian • Danish • Czech • Hungarian • Polish • Turkish • Irish • Icelandic • Estonian • Latvian • Lithuanian • Slovak • Slovene • Maltese • Bulgarian • Romanian

Figure 2-3 Character Samples: nintendo_HeiMedium-B5_002

テレビの電源をONにしてから設定してください。

Turn your television on before configuring these settings.

更新「最新活動」相關資訊

0123456789 !"#%&'()*+,-./:;<=>?@

2.5 Hangul

The system font that supports Hangul characters is called nintendo_Tae-Gothic_002. See *nintendo_Tae-Gothic_002.pdf* for a list of characters included in the font.

Table 2-4 Specifications: nintendo_Tae-Gothic_002

Included Character Sets	Supported Languages
<p>A total of 17,738 characters are included from the following character sets:</p> <ul style="list-style-type: none"> • ASCII 95 • CP1252 • ISO 8859-1 (Latin-1) • CP1253 + ISO 8859-7 • Fullwidth ASCII 94 • Symbols for compatibility with Japanese/North American/European fonts • Hangul Symbol 539 • Hangul Jamo Compatibility 94 • KS X 1001 • KS C 5601 • Nintendo extended characters 	<ul style="list-style-type: none"> • Hangul (Korean) • English (North America and Europe) • French (Europe and Canada) • Spanish (Europe and Latin America) • Portuguese (Europe and Brazil) • German • Italian • Dutch • Russian • Greek • Swedish • Finnish • Norwegian • Danish • Czech • Hungarian • Polish • Turkish • Irish • Icelandic • Estonian • Latvian • Lithuanian • Slovak • Slovene • Maltese • Bulgarian • Romanian

Figure 2-4 Character Samples: nintendo_Tae-Gothic_002

テレビの電源をONにしてから設定してください。
Turn your television on before configuring these settings.
포켓몬은 Nintendo의 상표입니다.
0123456789 !"#%&'()*+,-./:;<=>?@

3 Introduction to Nintendo Extended Characters and Cautionary Notes











Nintendo extended characters are proprietary Nintendo pictographs that are recorded in the Private Use Area of system fonts. They cannot be displayed with non-system fonts.












The following chapter provides an introduction to the Nintendo extended characters that represent input features on the Wii U, and cautionary notes concerning their use.

3.1 Nintendo Extended Characters for Wii U GamePad and Wii U Pro Controller

These extended characters represent input features of the Wii U GamePad and the Wii U Pro Controller. See the "Caution" column for information on characters that require special attention during use.

Table 3-1 Nintendo Extended Characters for Wii U GamePad and Wii U Pro Controller

Character	Character Code	Content	Caution
	E000	A Button	This is the same as E042, but E000 should be used for the A Button on the Wii U GamePad.
	E001	B Button	
	E002	X Button	
	E003	Y Button	
	E040	POWER Button	Use E040 for the POWER Button on the Wii U console. Use E078 for the POWER Button on the Nintendo 3DS.
	E041	+Control Pad	
	E044	HOME Button	Use E044 for the HOME Button on the Wii U console. Use E073 for the HOME Button on the Nintendo 3DS.
	E045	+ Button/START	
	E046	- Button/SELECT	
	E080	L/R Sticks	Use in cases where there is no particular need to specify left or right.











Character	Character Code	Content	Caution
	E081	L Stick	Represents the Left Stick.
	E082	R Stick	Represents the Right Stick.
	E083	L Button	Although the shape differs from the actual Wii U Pro Controller, Nintendo recommends using this extended character to represent the L Button on the Pro Controller.
	E084	R Button	Although the shape differs from the actual Wii U Pro Controller, Nintendo recommends using this extended character to represent the R Button on the Pro Controller.
	E085	ZL Button	Although the shape differs from the actual Wii U Pro Controller, Nintendo recommends using this extended character to represent the ZL Button on the Pro Controller.
	E086	ZR Button	Although the shape differs from the actual Wii U Pro Controller, Nintendo recommends using this extended character to represent the ZR Button on the Pro Controller.
	E087	Wii U GamePad	
	E089	TV CONTROL Button	This extended character represents the TV Control feature. Use for any other purpose is prohibited. For example, this extended character may not be used to represent a TV monitor. In such cases, use "TV" or other words from the glossary.
	E08A	L Stick (press)	Represents the act of pressing the Left Stick. Use for any other purpose is prohibited.
	E08B	R Stick (press)	Represents the act of pressing the Right Stick. Use for any other purpose is prohibited.
	E099	(TBD)	

- Note:** The A, B, X, and Y buttons on the Wii U GamePad and the Wii U Pro Controller use uppercase letters, but the a, b, x, and y buttons on the Classic Controller and the Classic Controller Pro use lowercase letters. When referring to the buttons on the Classic Controller, Nintendo recommends the use of extended characters with lowercase notation. If you are unsure of which controller will be used, Nintendo recommends using the extended characters with uppercase notation because it will convey the meaning and the majority of users will probably be using a controller with uppercase buttons.
- Note:** There is no extended character representing the Wii U Pro Controller. If you need a picture representation, see the *Wii U Illustration Collection*.

3.2 Nintendo Extended Characters for Wii Remote

These extended characters represent the input features of the Wii Remote. See the "Caution" column for information on characters that require special attention during use.




Table 3-2 Nintendo Extended Characters for Wii Remote

Character	Character Code	Content	Caution
	E040	POWER Button	Use E040 for the POWER Button on the Wii U console. Use E078 for the POWER Button on the Nintendo 3DS.
	E041	+Control Pad	
	E042	A Button	This is the same as E000, but E042 should be used for the A Button on the Wii Remote.
	E043	B Button	
	E044	HOME Button	Use E044 for the HOME Button on the Wii U console. Use E073 for the HOME Button on the Nintendo 3DS.
	E045	+ Button	
	E046	- Button	
	E047	1 Button	
	E048	2 Button	
	E088	Wii Remote	Represents the Wii Remote.

3.3 Nintendo Extended Characters for Nunchuk

These extended characters represent the input features of the Nunchuk.









Table 3-3 Nintendo Extended Characters for Nunchuk


Character	Character Code	Content	Caution
	E049	Control Stick	
	E04A	C Button	
	E04B	Z Button	

3.4 Other Nintendo Extended Characters and Cautionary Notes

This section gives an introduction to Nintendo extended characters that require background knowledge before use. You are free to use any of the characters, with the exception of those that are listed as forbidden.

Table 3-4 Other Nintendo Extended Characters and Cautionary Notes

Character	Character Code	Content	Caution
	E01D	Calibration	Represents the touch point in Touch Screen Calibration.
	E01E	Capturing still images	Represents the camera function that captures still images.
	E067	Wii logo	Forbidden
	E073	HOME Button	Represents the HOME Button on the Nintendo 3DS. Use E044 for the HOME Button on the Wii U console.
	E074	Steps Taken	Used when displaying the number of steps taken.
	E075	Play Coins	Represents Play Coins on the Nintendo 3DS system. Use for any purpose other than representing Play Coins is prohibited.
	E076	Video capture	Represents the camera function that captures video.
	E077	Circle Pad	This is the Circle Pad on the Nintendo 3DS system.

Character	Character Code	Content	Caution
	E078	POWER Button	This is the POWER Button on the Nintendo 3DS system. Use E040 for the POWER Button on the Wii U console. Use E078 for the POWER Button on the Nintendo 3DS and the Nintendo 3DS XL.

4 Other Information

4.1 Kerning

The kerning feature is used to adjust the spacing between certain characters. The new system fonts include kerning information. The use of kerning is optional.

System fonts contain kerning information for ASCII characters and alphabet characters used in European languages. When kerning is applied, the spacing between characters from these character sets is narrowed or expanded. For more information, see the font library documentation.

Figure 4-1 Example of Kerning Off and Kerning On



Note: Kerning is not used when displaying the characters on the software keyboard.

4.2 Character Width

The maximum character width in a Wii U system font is the width of a fullwidth character. This is the same for all regions. The character with the minimum character width is different for each region. Check the attached XML file for details.

4.3 Compatibility with Nintendo 3DS System Fonts

The Wii U system fonts are an upgrade to the Nintendo 3DS system fonts. All of the characters contained in the Nintendo 3DS system fonts are also included in the Wii U system fonts.

4.4 Display of Copyright Notice

A copyright notice is not required on e-manuals and other documentation for use with Wii U software.

Revision History

Version	Revision Date	Category	Description
1.0	2013/02/13	—	Initial version.

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