# Proposal to Include IEC Power Button Symbols in Unicode

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#### Abstract

The international symbols IEC 60417-5009 b meaning 'power' and IEEE-STD-1621 c meaning 'stand-by' are not in Unicode. Clearly these signs would be useful to anyone writing technical or user manuals. Furthermore, for electronically published documentation, it is crucial to have the symbols defined in Unicode because it makes them searchable in text. In this proposal we provide a TrueType font named 'IECpower' containing the glyphs as specified in three international standards together with all needed character properties.

### 1 Introduction

The following symbols are defined in IEC 60417, which is also ISO 7000:2012, and IEEE 1621, which describes the current practice [1, 3, 2].

The five symbols defined in this font are shown in Table 1. Only these symbols are defined; if an undefined character, for example 'A' is called for in the font, the result is implementation-defined. In X<sub>2</sub>T<sub>E</sub>X the result is . In OpenOffice Writer, the result is 'A' in a san-serif typeface.

Symbol	Standard	Character	Mnemonic	Meaning
ሁ	IEC 60417-5009	P	'power'	Power
O	IEC 60417-5010	${ m T}$	'toggle'	Power on/off
0	IEC 60417-5008	0	'binary zero'	Power off
l	IEC 60417-5007	1	'binary one'	Power on
	IEEE 6121	$\mathbf{S}$	'sleep'	Stand-by

Table 1: All of the available glyphs in the IEC power TrueType font.

In text with normal spacing, the **b** characters **O** look **I** like **C** this **O**.

#### 2 How this document was made

There is an excellent SVG font tutorial at <a href="http://www.webdesignerdepot.com/2012/01/how-to-make-your-own-icon-webfont/">http://www.webdesignerdepot.com/2012/01/how-to-make-your-own-icon-webfont/</a> specifically aimed at generating icon fonts and includes an SVG font starter file, instructions for using the SVG font editor in Inkscape, recommendations about which on-line font converters are reliable, and tips for editing the metadata and distributing the new font afterwards.

## 2.1 TrueType fonts in LATEX

To use the TrueType font in TEX, this file must be compiled with XTEX and the font should be installed on the system ahead of time.

#### References

- [1] IEEE Standards Association. *IEEE Standard for User Interface Elements in Power Control of Electronic Devices Employed in Office/Consumer Environments*, 2004. IEEE-STD-1621-2004.
- [2] International Electrotechnical Commission. *IEC 60417: Graphical symbols for use on equipment*, 2005.
- [3] International Organisation for Standardisation. ISO 7000:2012, Graphical symbols for use on equipment—Registered symbols, 2012.