


































Universal Multiple-Octet Coded Character Set
International Organization for Standardization
Organisation Internationale de Normalisation
Международная организация по стандартизации

Doc Type: Working Group Document
Title: Glyphs for Egyptian Hieroglyphic control characters
Source: Michael Everson and Andrew Glass
Status: Individual Contribution
Date: 2018-01-18

Ideographic Description characters are printing graphic characters not intended to be used as control characters. Their glyphs consist of a dotted box with dotted lines indicating various positionings for CJK ideographs.


2FF			Ideographic description characters
0		2FF0	2FF0  IDEOGRAPHIC DESCRIPTION CHARACTER LEFT TO RIGHT
1		2FF1	2FF1  IDEOGRAPHIC DESCRIPTION CHARACTER ABOVE TO BELOW
2		2FF2	2FF2  IDEOGRAPHIC DESCRIPTION CHARACTER LEFT TO MIDDLE AND RIGHT
3		2FF3	2FF3  IDEOGRAPHIC DESCRIPTION CHARACTER ABOVE TO MIDDLE AND BELOW
4		2FF4	2FF4  IDEOGRAPHIC DESCRIPTION CHARACTER FULL SURROUND
5		2FF5	2FF5  IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM ABOVE
6		2FF6	2FF6  IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM BELOW
7		2FF7	2FF7  IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM LEFT
8		2FF8	2FF8  IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM UPPER LEFT
9		2FF9	2FF9  IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM UPPER RIGHT
A		2FFA	2FFA  IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM LOWER LEFT
B		2FFB	2FFB  IDEOGRAPHIC DESCRIPTION CHARACTER OVERLAID


PDAM 2.2 contains the following glyphs for Egyptian control characters:

	1343
0	 13430
1	 13431
2	 13432
3	 13433
4	 13434
5	 13435
6	 13436
7	 13437
8	 13438


Joiners


Used to render Egyptian hieroglyphic quadrats

13430  EGYPTIAN HIEROGLYPH VERTICAL JOINER
= sign separator: subordination (Manuel de Codage)


13431  EGYPTIAN HIEROGLYPH HORIZONTAL JOINER
= sign separator: juxtaposition (Manuel de Codage)

Insertion controls


13432  EGYPTIAN HIEROGLYPH START AT TOP

13433  EGYPTIAN HIEROGLYPH START AT BOTTOM


13434  EGYPTIAN HIEROGLYPH END AT TOP


13435  EGYPTIAN HIEROGLYPH END AT BOTTOM

Stack control

13436  EGYPTIAN HIEROGLYPH OVERLAY MIDDLE

Segment delimiters

13437  EGYPTIAN HIEROGLYPH BEGIN SEGMENT

13438  EGYPTIAN HIEROGLYPH END SEGMENT

Irish ballot comments on PDAM 2 (2017-08-25) argued against the use of this type of glyph for control characters, and recommended different ones be used:

E2. Page 17, Row 1343: Egyptian Hieroglyphs Format Controls. Ireland requests that the glyphs for these characters be revised. Control characters in the UCS typically have identifying letter abbreviations in their dotted-box glyphs. The exception to this is the Ideographic Description Characters, which are intended to be “visibly displayed graphic characters, not invisible composition controls” as the annotation to the code chart states. The glyphs of the Egyptian characters in this PDAM are hardly distinguishable from those of the Ideographic Description Characters, and we believe this could be confusing to users and implementers. We propose that the glyphs below be used.






13430 EGYPTIAN HIEROGLYPH VERTICAL JOINER



13431 EGYPTIAN HIEROGLYPH HORIZONTAL JOINER





13432 EGYPTIAN HIEROGLYPH START AT TOP

EGY SB 	13433 EGYPTIAN HIEROGLYPH START AT BOTTOM
EGY ET 	13434 EGYPTIAN HIEROGLYPH END AT TOP
EGY EB 	13435 EGYPTIAN HIEROGLYPH END AT BOTTOM
EGY BS (13437 EGYPTIAN HIEROGLYPH BEGIN SEGMENT
EGY ES)	13438 EGYPTIAN HIEROGLYPH END SEGMENT

It should be noted that some types of control characters use dotted circles to indicate glyph relationships, rather than letter abbreviations, but the Irish comment is valid in that a similarity in glyphs between the Ideographic Description Characters, which are printable graphic characters and not control characters, and the Egyptian hieroglyphic controls could cause confusion to some users of both communities.

It is true that the glyphs proposed in the Irish comments on PDAM 2 are somewhat “busy” but we found it relatively easy to come to a compromise which we think should satisfy both SC2 and the UTC.

EVJ :	13430 EGYPTIAN HIEROGLYPH VERTICAL JOINER
EHJ *	13431 EGYPTIAN HIEROGLYPH HORIZONTAL JOINER
EST 	13432 EGYPTIAN HIEROGLYPH START AT TOP
ESB 	13433 EGYPTIAN HIEROGLYPH START AT BOTTOM
EET 	13434 EGYPTIAN HIEROGLYPH END AT TOP
EEB 	13435 EGYPTIAN HIEROGLYPH END AT BOTTOM
EOM 	13436 EGYPTIAN HIEROGLYPH OVERLAY MIDDLE
EBS (13437 EGYPTIAN HIEROGLYPH BEGIN SEGMENT
EES)	13438 EGYPTIAN HIEROGLYPH END SEGMENT

