ISO/IEC JTC1/SC2/WG2 N2415
2002-02-12

L2/02-085

Universal Multiple Octet Coded Character Set
International Organization for Standardization
Organisation internationale de normalisation
Международная организация по стандартизации

Doc Type: **Working Group Document**
Title: **Playback Symbols**
Source: **Asmus Freytag, Michael Everson, and Deborah Goldsmith**
Status: **Expert contribution**
Action: **For consideration by JTC1/SC2/WG2 and UTC**
Related: **L2/02-072:Proposal to encode EJECT SYMBOL, L2/01-452:Response to the EJECT SYMBOL proposal**

The recently proposed EJECT SYMBOL is part of a larger set of related user interface symbols for removable and audio-visual media, and navigational controls in a larger sense. See Figures 1-10 below for screen shots of several common examples of software user interfaces for such media. These interfaces are modeled after interfaces found on hardware devices. (See figures 11-13 for screen shots showing some of these symbols in general navigational controls.)

Some of these symbols are simple geometrical shapes, occasionally with different sizes or aspect ratios than existing Unicode characters. At least some of them can therefore be unified with existing characters. Of the remaining set, the characters marked with a † could be considered for encoding as technical symbols.

The set of symbols common to the types of interfaces under consideration here includes the following symbols. They are presented here with arbitrary code positions in the private use area, and suggestive names, but this is merely for convenience in talking about them. The glyphs have been taken from existing and widely available symbol fonts supporting these kinds of symbols.

Playback buttons

25FC ■ BLACK MEDIUM SQUARE
= stop playback

E0CD ● MEDIUM CIRCLE
= record

E0CB ⏸ PAUSE †

25C0 ◀ BLACK LEFT-POINTING TRIANGLE
= reverse

25B6 ▶ BLACK RIGHT-POINTING TRIANGLE
= forward

E0C7 ◀◀ FAST FORWARD †

E0C8 ▶▶ FAST REVERSE †

E0C9 |◀◀ GO TO BEGINNING †

E0CA ▶▶| GO TO END †

EDD6 ◢ BLACK RISING RAMP (†)
= volume

ED62 ⏏ EJECT SYMBOL
* the particular font shows a white variant of this symbol

Notes: The code locations are private use codes assigned purely for the convenience of creating this document. The size of the symbols is set in 20pt type for ease of comparison, while the text is set at 12pt.

Size of triangles
As can be seen from Figures 1-4, there is considerable variation in the width of the symbols containing triangles. The triangles in E0C8 etc. are smaller and considerably flatter than the existing black triangles. Variations of E0C8 etc. using triangles that are much smaller are common, in order to fit the symbol into the same size cell as the single triangle for “playback’. Because of this clear tendency to see the composite symbols are single units, any encoding should treat them as units, even though the same appearance might be achievable by juxtaposition of other characters.

Unifications
Variations of E0C9 and E0CA with single triangle are common and are sometimes used to indicate skipping a lesser distance than E0C9 and E0CA, but often are used interchangeably.

The STOP PLAYBACK can be unified with the existing 25FC BLACK MEDIUM SQUARE, but Unicode does not contain a circle of matching size that can be used for the record symbol.

The rising ramp for volume is more common on hardware device user interfaces than on their software re-implementations, since software user interfaces use the metaphor of a slider. For an example of a vertically positioned slider, with vertical rising ramp, see Figure 1.

Other navigational symbols
There is a set of medium sized triangles as follows:

E0C3 ◀ BLACK MEDIUM LEFT-POINTING TRIANGLE

E0C4 ▶ BLACK MEDIUM RIGHT-POINTING TRIANGLE

E0C5 ▲ BLACK MEDIUM UP-POINTING TRIANGLE
= increase

x 25B2 ▲ black up-pointing triangle

E0C6 ▼ BLACK MEDIUM DOWN-POINTING TRIANGLE
= decrease

x 25BC ▼ black down-pointing triangle

These shapes are used in user interfaces for various indications of "left" and "right", "up" and "down". Unlike the BLACK TRIANGLE series, the up and down triangles are consistently aligned to be wholly above and below the centerline, compare 25B2 and 25BC to E0C5 and E0C6.

NW, SE, NE, SW oriented triangle shapes are used in some navigation user interfaces, e.g. for viewing maps on the web, see figure 13. While these symbols might be future candidates for consideration, at the current time they are listed here merely for information.

Examples

Figures 1-10 show typical ranges of graphic symbols for user interface on media player software. Figures 11-13 show other navigational controls.

Figure 1.: Sound recorder example

Figure 2.: CD player example

Figure 3.: DVD player example 1

Figure 4.: DVD player example 2

Figure 5.: volume control (horizontal)

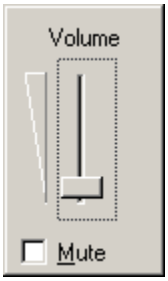

Figure 6.: Volume control (vertical)

Figure 7.: QuickTime player

Figure 8.: Windows Media Player for Mac OS X

Figure 9.: Apple DVD Player

Figure 10.: iTunes

Figure 11.: Navigation Controls example 1

Figure 12.: Navigation controls example 2

Figure 13.: Map relocation controls