

ASCII Graphics on Multics

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June 30, 1966

A number of individuals have expressed interest in what the graphics of the ASCII set should "look like" when they are displayed or printed by Multics systems. Since the ASCII standard specifies nothing about the appearance of the graphics, this memo collects together a number of ideas and suggestions that have been made for use on Multics.

Distinguishability: It is essential that all characters be easily distinguishable from all other characters, preferably under adverse conditions. Potential confusion can result between:

- (1) numeral one, (l) lower case L, (/) vertical bar,
- (i) lower case I, and (!) exclamation point
- (5) numeral five and (S) upper case s.
- (¯) overline, and (¯) underline on successive lines
- (0) numeral zero and (O) upper case o.

Font designs: No font design for the alphabetic letters has been chosen for Multics, but the IBM "Courier 72" font styles have been suggested as very readable models from which to begin.

Special CharactersDesign Objectives of Graphics

1. Underline: Should be below tail of descenders.
Should connect in successive print positions
2. Acute accent: Should overstrike as in é and ó and appear well in "don't"
3. Vertical line: Should be centered.
Should connect on successive lines.
4. Left slant: Mirror image of slant.
Should cross slant at center when overstruck

5. Overline ^{diagonal ~} Should be distinctly above all letters, e.g., \bar{T}
Should connect in successive print positions
6. Circumflex: Should overstrike as in \hat{o}
7. Comma: Should overstrike as in \grave{c} (cedilla)
8. Double quotes: Should also overstrike \ddot{o} (diaresis)
9. Grave accent: Symmetric to acute accent
Should overstrike as in \grave{a} and \grave{e}
10. Asterisk: Should have five points, not six, to avoid cluttered appearance.

Good samples of the alphabetic and numeric characters appear on IBM typeballs 015 and 033; many of the special characters appear on ball 963.

It is not expected that all of these design objectives can be met by any single device (except, maybe, a high-quality CRT display), but they do represent benchmarks and something to measure "up to".