# Miscellaneous Technical

**Range: 2300–23FF**

**The Unicode Standard, Version 9.0**

This file contains an excerpt from the character code tables and list of character names for
*The Unicode Standard, Version 9.0*

Characters in this chart that are new for The Unicode Standard, Version 9.0 are shown in conjunction with any existing characters. For ease of reference, the new characters have been highlighted in the chart grid and in the names list.

This file will not be updated with errata, or when additional characters are assigned to the Unicode Standard.
*See http://www.unicode.org/errata/ for an up-to-date list of errata.*

See http://www.unicode.org/charts/ for access to a complete list of the latest character code charts.
See http://www.unicode.org/charts/PDF/Unicode-9.0/ for charts showing only the characters added in Unicode 9.0.
See http://www.unicode.org/Public/9.0.0/charts/ for a complete archived file of character code charts for Unicode 9.0.

## Disclaimer

These charts are provided as the online reference to the character contents of the Unicode Standard, Version 9.0 but do not provide all the information needed to fully support individual scripts using the Unicode Standard. For a complete understanding of the use of the characters contained in this file, please consult the appropriate sections of The Unicode Standard, Version 9.0, online at http://www.unicode.org/versions/Unicode9.0.0/, as well as Unicode Standard Annexes #9, #11, #14, #15, #24, #29, #31, #34, #38, #41, #42, #44, and #45, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available online.

*See http://www.unicode.org/ucd/ and http://www.unicode.org/reports/*

A thorough understanding of the information contained in these additional sources is required for a successful implementation.

## Fonts

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*See http://www.unicode.org/charts/fonts.html for a list.*

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*See http://www.unicode.org/pending/pending.html and http://www.unicode.org/alloc/Pipeline.html.*

| | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 23A | 23B | 23C | 23D | 23E | 23F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 2300 | 2310 | 2320 | 2330 | 2340 | 2350 | 2360 | 2370 | 2380 | 2390 | 23A0 | 23B0 | 23C0 | 23D0 | 23E0 | 23F0 |
| 1 | 2301 | 2311 | 2321 | 2331 | 2341 | 2351 | 2361 | 2371 | 2381 | 2391 | 23A1 | 23B1 | 23C1 | 23D1 | 23E1 | 23F1 |
| 2 | 2302 | 2312 | 2322 | 2332 | 2342 | 2352 | 2362 | 2372 | 2382 | 2392 | 23A2 | 23B2 | 23C2 | 23D2 | 23E2 | 23F2 |
| 3 | 2303 | 2313 | 2323 | 2333 | 2343 | 2353 | 2363 | 2373 | 2383 | 2393 | 23A3 | 23B3 | 23C3 | 23D3 | 23E3 | 23F3 |
| 4 | 2304 | 2314 | 2324 | 2334 | 2344 | 2354 | 2364 | 2374 | 2384 | 2394 | 23A4 | 23B4 | 23C4 | 23D4 | 23E4 | 23F4 |
| 5 | 2305 | 2315 | 2325 | 2335 | 2345 | 2355 | 2365 | 2375 | 2385 | 2395 | 23A5 | 23B5 | 23C5 | 23D5 | 23E5 | 23F5 |
| 6 | 2306 | 2316 | 2326 | 2336 | 2346 | 2356 | 2366 | 2376 | 2386 | 2396 | 23A6 | 23B6 | 23C6 | 23D6 | 23E6 | 23F6 |
| 7 | 2307 | 2317 | 2327 | 2337 | 2347 | 2357 | 2367 | 2377 | 2387 | 2397 | 23A7 | 23B7 | 23C7 | 23D7 | 23E7 | 23F7 |
| 8 | 2308 | 2318 | 2328 | 2338 | 2348 | 2358 | 2368 | 2378 | 2388 | 2398 | 23A8 | 23B8 | 23C8 | 23D8 | 10 23E8 | 23F8 |
| 9 | 2309 | 2319 | 2329 | 2339 | 2349 | 2359 | 2369 | 2379 | 2389 | 2399 | 23A9 | 23B9 | 23C9 | 23D9 | 23E9 | 23F9 |
| A | 230A | 231A | 232A | 233A | 234A | 235A | 236A | 237A | 238A | 239A | 23AA | 23BA | 23CA | 23DA | 23EA | 23FA |
| B | 230B | 231B | 232B | 233B | 234B | 235B | 236B | 237B | 238B | 239B | 23AB | 23BB | 23CB | 23DB | 23EB | 23FB |
| C | 230C | 231C | 232C | 233C | 234C | 235C | 236C | 237C | 238C | 239C | 23AC | 23BC | 23CC | 23DC | 23EC | 23FC |
| D | 230D | 231D | 232D | 233D | 234D | 235D | 236D | 237D | 238D | 239D | 23AD | 23BD | 23CD | 23DD | 23ED | 23FD |
| E | 230E | 231E | 232E | 233E | 234E | 235E | 236E | 237E | 238E | 239E | 23AE | 23BE | 23CE | 23DE | 23EE | 23FE |
| F | 230F | 231F | 232F | 233F | 234F | 235F | 236F | 237F | 238F | 239F | 23AF | 23BF | 23CF | 23DF | 23EF | |

**Miscellaneous technical**

2300 ⌀ DIAMETER SIGN
→ 2205 ∅ empty set
2301 ↯ ELECTRIC ARROW
• from ISO 2047
• symbol for End of Transmission
2302 ⌂ HOUSE
2303 ⌃ UP ARROWHEAD
→ 005E ^ circumflex accent
→ 02C4 ˄ modifier letter up arrowhead
→ 2038 ‸ caret
→ 2227 ∧ logical and
2304 ⌄ DOWN ARROWHEAD
→ 02C5 ˅ modifier letter down arrowhead
→ 2228 ∨ logical or
→ 2335 ⌵ countersink
2305 ⌅ PROJECTIVE
→ 22BC ⊼ nand
2306 ⌆ PERSPECTIVE
2307 ⌇ WAVY LINE
→ 2E3E ⸾ wiggly vertical line
→ 3030 〰 wavy dash

**Ceilings and floors**

*These characters are tall and narrow mathematical delimiters, in contrast to the quine corners or half brackets. They are also distinct from CJK corner brackets, which are wide quotation marks.*

2308 ⌈ LEFT CEILING
= APL upstile
→ 2E22 ⸢ top left half bracket
→ 300C 「 left corner bracket
2309 ⌉ RIGHT CEILING
→ 20E7 ⃧ combining annuity symbol
→ 2E23 ⸣ top right half bracket
230A ⌊ LEFT FLOOR
= APL downstile
→ 2E24 ⸤ bottom left half bracket
230B ⌋ RIGHT FLOOR
→ 300D 」 right corner bracket
→ 2E25 ⸥ bottom right half bracket

**Crops**

230C ⌌ BOTTOM RIGHT CROP
• set of four "crop" corners, arranged facing outward
230D ⌍ BOTTOM LEFT CROP
230E ⌎ TOP RIGHT CROP
230F ⌏ TOP LEFT CROP

**Miscellaneous technical**

2310 ⌐ REVERSED NOT SIGN
= beginning of line
→ 00AC ¬ not sign
2311 ⌑ SQUARE LOZENGE
= Kissen (pillow)
• used as a command delimiter in some very old computers
→ 2BCF ⯏ rotated white four pointed cusp
2312 ⌒ ARC
= position of any line
→ 25E0 ◠ upper half circle
2313 ⌓ SEGMENT
= position of a surface
2314 ⌔ SECTOR

2315 ⌕ TELEPHONE RECORDER
2316 ⌖ POSITION INDICATOR
= true position
→ 2BD0 ⯐ square position indicator
2317 ⌗ VIEWDATA SQUARE
→ 22D5 ⋕ equal and parallel to
2318 ⌘ PLACE OF INTEREST SIGN
= command key (1.0)
= operating system key (ISO 9995-7)
2319 ⌙ TURNED NOT SIGN
= line marker

**User interface symbols**

231A ⌚ WATCH
→ 23F0 ⏰ alarm clock
→ 1F550 🕐 clock face one oclock
~ 231A FE0E text style
~ 231A FE0F emoji style
231B ⌛ HOURGLASS
= alchemical symbol for hour
~ 231B FE0E text style
~ 231B FE0F emoji style

**Quine corners**

*These form a set of four quine corners, for quincuncial arrangement. They are also used in upper and lower pairs in mathematic, or more rarely in editorial usage as alternatives to half brackets.*

231C ⌜ TOP LEFT CORNER
→ 2E00 ⸀ right angle substitution marker
→ 2E22 ⸢ top left half bracket
231D ⌝ TOP RIGHT CORNER
231E ⌞ BOTTOM LEFT CORNER
231F ⌟ BOTTOM RIGHT CORNER

**Integral pieces**

2320 ⌠ TOP HALF INTEGRAL
→ 23AE ⎮ integral extension
2321 ⌡ BOTTOM HALF INTEGRAL

**Frown and smile**

2322 ⌢ FROWN
→ 2040 ⁀ character tie
2323 ⌣ SMILE
→ 203F ‿ undertie

**Keyboard symbols**

2324 ⌤ UP ARROWHEAD BETWEEN TWO HORIZONTAL BARS
= enter key
2325 ⌥ OPTION KEY
2326 ⌦ ERASE TO THE RIGHT
= delete to the right key
2327 ⌧ X IN A RECTANGLE BOX
= clear key
2328 ⌨ KEYBOARD
→ 1F5A6 🖦 keyboard and mouse
→ 1F5AE 🖮 wired keyboard
~ 2328 FE0E text style
~ 2328 FE0F emoji style

**Deprecated angle brackets**

*These characters are deprecated and are strongly discouraged for mathematical use because of their canonical equivalence to CJK punctuation.*

2329 〈 LEFT-POINTING ANGLE BRACKET
→ 003C < less-than sign
→ 2039 ‹ single left-pointing angle quotation mark
→ 27E8 ⟨ mathematical left angle bracket
≡ 3008 〈 left angle bracket

232A 〉 RIGHT-POINTING ANGLE BRACKET
→ 003E > greater-than sign
→ 203A › single right-pointing angle quotation mark
→ 27E9 ⟩ mathematical right angle bracket
≡ 3009 〉 right angle bracket

**Keyboard symbol**

232B ⌫ ERASE TO THE LEFT
= delete to the left key

**Chemistry symbol**

232C ⬡ BENZENE RING

**Drafting symbols**

232D ⌭ CYLINDRICITY
232E ⌮ ALL AROUND-PROFILE
232F ⌯ SYMMETRY
2330 ⌰ TOTAL RUNOUT
2331 ⌱ DIMENSION ORIGIN
2332 ⊳ CONICAL TAPER
2333 ⌳ SLOPE
→ 25FA ◿ lower left triangle
2334 ⌴ COUNTERBORE
→ 2423 ␣ open box
2335 ⌵ COUNTERSINK
→ 2304 ⌄ down arrowhead

**APL**

2336 ⌶ APL FUNCTIONAL SYMBOL I-BEAM
2337 ⌷ APL FUNCTIONAL SYMBOL SQUISH QUAD
→ 2395 ⎕ apl functional symbol quad
→ 25AF ▯ white vertical rectangle
→ 2AFF ⫿ n-ary white vertical bar
2338 ⌸ APL FUNCTIONAL SYMBOL QUAD EQUAL
2339 ⌹ APL FUNCTIONAL SYMBOL QUAD DIVIDE
233A ⌺ APL FUNCTIONAL SYMBOL QUAD DIAMOND
→ 26CB ⛋ white diamond in square
233B ⌻ APL FUNCTIONAL SYMBOL QUAD JOT
→ 29C7 ⧇ squared small circle
233C ⌼ APL FUNCTIONAL SYMBOL QUAD CIRCLE
233D ⌽ APL FUNCTIONAL SYMBOL CIRCLE STILE
233E ⌾ APL FUNCTIONAL SYMBOL CIRCLE JOT
→ 229A ⊚ circled ring operator
→ 29BE ⦾ circled white bullet
233F ⌿ APL FUNCTIONAL SYMBOL SLASH BAR
→ 1019A 𐆚 roman as sign
2340 ⍀ APL FUNCTIONAL SYMBOL BACKSLASH BAR
→ 29F7 ⧷ reverse solidus with horizontal stroke
2341 ⍁ APL FUNCTIONAL SYMBOL QUAD SLASH
→ 29C4 ⧄ squared rising diagonal slash
2342 ⍂ APL FUNCTIONAL SYMBOL QUAD BACKSLASH
→ 29C5 ⧅ squared falling diagonal slash
2343 ⍃ APL FUNCTIONAL SYMBOL QUAD LESS-THAN

2344 ⍄ APL FUNCTIONAL SYMBOL QUAD GREATER-THAN
2345 ⍅ APL FUNCTIONAL SYMBOL LEFTWARDS VANE
2346 ⍆ APL FUNCTIONAL SYMBOL RIGHTWARDS VANE
2347 ⍇ APL FUNCTIONAL SYMBOL QUAD LEFTWARDS ARROW
2348 ⍈ APL FUNCTIONAL SYMBOL QUAD RIGHTWARDS ARROW
2349 ⍉ APL FUNCTIONAL SYMBOL CIRCLE BACKSLASH
→ 29B0 ⦰ reversed empty set
234A ⍊ APL FUNCTIONAL SYMBOL DOWN TACK UNDERBAR
= up tack underbar
• preferred naming for APL tack symbols now follows the London Convention in ISO/IEC 13751:2000 (APL Extended)
→ 22A5 ⊥ up tack
234B ⍋ APL FUNCTIONAL SYMBOL DELTA STILE
234C ⍌ APL FUNCTIONAL SYMBOL QUAD DOWN CARET
234D ⍍ APL FUNCTIONAL SYMBOL QUAD DELTA
234E ⍎ APL FUNCTIONAL SYMBOL DOWN TACK JOT
= up tack jot
→ 22A5 ⊥ up tack
234F ⍏ APL FUNCTIONAL SYMBOL UPWARDS VANE
2350 ⍐ APL FUNCTIONAL SYMBOL QUAD UPWARDS ARROW
2351 ⍑ APL FUNCTIONAL SYMBOL UP TACK OVERBAR
= down tack overbar
→ 22A4 ⊤ down tack
→ 3012 〒 postal mark
2352 ⍒ APL FUNCTIONAL SYMBOL DEL STILE
2353 ⍓ APL FUNCTIONAL SYMBOL QUAD UP CARET
→ 2BB9 ⮹ up arrowhead in a rectangle box
2354 ⍔ APL FUNCTIONAL SYMBOL QUAD DEL
2355 ⍕ APL FUNCTIONAL SYMBOL UP TACK JOT
= down tack jot
→ 22A4 ⊤ down tack
2356 ⍖ APL FUNCTIONAL SYMBOL DOWNWARDS VANE
2357 ⍗ APL FUNCTIONAL SYMBOL QUAD DOWNWARDS ARROW
2358 ⍘ APL FUNCTIONAL SYMBOL QUOTE UNDERBAR
2359 ⍙ APL FUNCTIONAL SYMBOL DELTA UNDERBAR
235A ⍚ APL FUNCTIONAL SYMBOL DIAMOND UNDERBAR
235B ⍛ APL FUNCTIONAL SYMBOL JOT UNDERBAR
235C ⍜ APL FUNCTIONAL SYMBOL CIRCLE UNDERBAR
235D ⍝ APL FUNCTIONAL SYMBOL UP SHOE JOT
→ 2A40 ⩀ intersection with dot
235E ⍞ APL FUNCTIONAL SYMBOL QUOTE QUAD
235F ⍟ APL FUNCTIONAL SYMBOL CIRCLE STAR
→ 229B ⊛ circled asterisk operator
2360 ⍠ APL FUNCTIONAL SYMBOL QUAD COLON
2361 ⍡ APL FUNCTIONAL SYMBOL UP TACK DIAERESIS
= down tack diaeresis
→ 22A4 ⊤ down tack
2362 ⍢ APL FUNCTIONAL SYMBOL DEL DIAERESIS
2363 ⍣ APL FUNCTIONAL SYMBOL STAR DIAERESIS
2364 ⍤ APL FUNCTIONAL SYMBOL JOT DIAERESIS
= hoot
2365 ⍥ APL FUNCTIONAL SYMBOL CIRCLE DIAERESIS
= holler
2366 ⍦ APL FUNCTIONAL SYMBOL DOWN SHOE STILE

| 2367 | Ⱶ | APL FUNCTIONAL SYMBOL LEFT SHOE STILE |
|------|---|---------------------------------------|
| 2368 | ⍨ | APL FUNCTIONAL SYMBOL TILDE DIAERESIS |
| | | = smirk |
| 2369 | ⍩ | APL FUNCTIONAL SYMBOL GREATER-THAN DIAERESIS |
| 236A | ⍪ | APL FUNCTIONAL SYMBOL COMMA BAR |
| 236B | ⍫ | APL FUNCTIONAL SYMBOL DEL TILDE |
| 236C | ⍬ | APL FUNCTIONAL SYMBOL ZILDE |
| 236D | ⍭ | APL FUNCTIONAL SYMBOL STILE TILDE |
| 236E | ⍮ | APL FUNCTIONAL SYMBOL SEMICOLON UNDERBAR |
| 236F | ⍯ | APL FUNCTIONAL SYMBOL QUAD NOT EQUAL |
| 2370 | ⍰ | APL FUNCTIONAL SYMBOL QUAD QUESTION |
| | | → 2BD1 ⯑ uncertainty sign |
| 2371 | ⍱ | APL FUNCTIONAL SYMBOL DOWN CARET TILDE |
| 2372 | ⍲ | APL FUNCTIONAL SYMBOL UP CARET TILDE |
| 2373 | ⍳ | APL FUNCTIONAL SYMBOL IOTA |
| 2374 | ⍴ | APL FUNCTIONAL SYMBOL RHO |
| 2375 | ⍵ | APL FUNCTIONAL SYMBOL OMEGA |
| 2376 | ⍶ | APL FUNCTIONAL SYMBOL ALPHA UNDERBAR |
| 2377 | ⍷ | APL FUNCTIONAL SYMBOL EPSILON UNDERBAR |
| 2378 | ⍸ | APL FUNCTIONAL SYMBOL IOTA UNDERBAR |
| 2379 | ⍹ | APL FUNCTIONAL SYMBOL OMEGA UNDERBAR |
| 237A | ⍺ | APL FUNCTIONAL SYMBOL ALPHA |

**Graphics for control codes**

| 237B | ⍻ | NOT CHECK MARK |
|------|---|----------------|
| | | • from ISO 2047 |
| | | • symbol for Negative Acknowledge |

**Miscellaneous technical**

| 237C | ⍼ | RIGHT ANGLE WITH DOWNWARDS ZIGZAG ARROW |
|------|---|------|

**Graphics for control codes**

| 237D | ⍽ | SHOULDERED OPEN BOX |
|------|---|---------------------|
| | | • from ISO 9995-7 |
| | | • keyboard symbol for No Break Space |
| | | → 2423 ␣ open box |
| 237E | ⍾ | BELL SYMBOL |
| | | • from ISO 2047 |
| 237F | ⍿ | VERTICAL LINE WITH MIDDLE DOT |
| | | • from ISO 2047 |
| | | • symbol for End of Medium |

**Keyboard symbols from ISO 9995-7**

| 2380 | ⎀ | INSERTION SYMBOL |
|------|---|------------------|
| 2381 | ⎁ | CONTINUOUS UNDERLINE SYMBOL |
| 2382 | ⎂ | DISCONTINUOUS UNDERLINE SYMBOL |
| 2383 | ⎃ | EMPHASIS SYMBOL |
| 2384 | ⎄ | COMPOSITION SYMBOL |
| 2385 | ⎅ | WHITE SQUARE WITH CENTRE VERTICAL LINE |
| | | = center |
| 2386 | ⎆ | ENTER SYMBOL |
| 2387 | ⎇ | ALTERNATIVE KEY SYMBOL |
| 2388 | ⎈ | HELM SYMBOL |
| | | = control |
| | | → 2638 ☸ wheel of dharma |
| 2389 | ⎉ | CIRCLED HORIZONTAL BAR WITH NOTCH |
| | | = pause |
| 238A | ⎊ | CIRCLED TRIANGLE DOWN |
| | | = interrupt, break |

| 238B | ⎋ | BROKEN CIRCLE WITH NORTHWEST ARROW |
|------|---|-----------------------------------|
| | | = escape |
| 238C | ⎌ | UNDO SYMBOL |

**Electrotechnical symbols from IR 181**

| 238D | ⎍ | MONOSTABLE SYMBOL |
|------|---|-------------------|
| 238E | ⎎ | HYSTERESIS SYMBOL |
| 238F | ⎏ | OPEN-CIRCUIT-OUTPUT H-TYPE SYMBOL |
| 2390 | ⎐ | OPEN-CIRCUIT-OUTPUT L-TYPE SYMBOL |
| 2391 | ⎑ | PASSIVE-PULL-DOWN-OUTPUT SYMBOL |
| 2392 | ⎒ | PASSIVE-PULL-UP-OUTPUT SYMBOL |
| 2393 | ⎓ | DIRECT CURRENT SYMBOL FORM TWO |
| 2394 | ⎔ | SOFTWARE-FUNCTION SYMBOL |

**APL**

| 2395 | ⎕ | APL FUNCTIONAL SYMBOL QUAD |
|------|---|----------------------------|
| | | → 2337 ⌷ apl functional symbol squish quad |
| | | → 25AF ▯ white vertical rectangle |

**Keyboard symbols from ISO 9995-7**

| 2396 | ⎖ | DECIMAL SEPARATOR KEY SYMBOL |
|------|---|------------------------------|
| 2397 | ⎗ | PREVIOUS PAGE |
| | | → 1F519 🔙 back with leftwards arrow above |
| 2398 | ⎘ | NEXT PAGE |
| 2399 | ⎙ | PRINT SCREEN SYMBOL |
| 239A | ⎚ | CLEAR SCREEN SYMBOL |
| | | → 20E2 ⃢ combining enclosing screen |

**Bracket pieces**

| 239B | ⎛ | LEFT PARENTHESIS UPPER HOOK |
|------|---|----------------------------|
| 239C | ⎜ | LEFT PARENTHESIS EXTENSION |
| 239D | ⎝ | LEFT PARENTHESIS LOWER HOOK |
| 239E | ⎞ | RIGHT PARENTHESIS UPPER HOOK |
| 239F | ⎟ | RIGHT PARENTHESIS EXTENSION |
| 23A0 | ⎠ | RIGHT PARENTHESIS LOWER HOOK |
| 23A1 | ⎡ | LEFT SQUARE BRACKET UPPER CORNER |
| 23A2 | ⎢ | LEFT SQUARE BRACKET EXTENSION |
| 23A3 | ⎣ | LEFT SQUARE BRACKET LOWER CORNER |
| 23A4 | ⎤ | RIGHT SQUARE BRACKET UPPER CORNER |
| 23A5 | ⎥ | RIGHT SQUARE BRACKET EXTENSION |
| 23A6 | ⎦ | RIGHT SQUARE BRACKET LOWER CORNER |
| 23A7 | ⎧ | LEFT CURLY BRACKET UPPER HOOK |
| 23A8 | ⎨ | LEFT CURLY BRACKET MIDDLE PIECE |
| 23A9 | ⎩ | LEFT CURLY BRACKET LOWER HOOK |
| 23AA | ⎪ | CURLY BRACKET EXTENSION |
| 23AB | ⎫ | RIGHT CURLY BRACKET UPPER HOOK |
| 23AC | ⎬ | RIGHT CURLY BRACKET MIDDLE PIECE |
| 23AD | ⎭ | RIGHT CURLY BRACKET LOWER HOOK |

**Special character extensions**

| 23AE | ⎮ | INTEGRAL EXTENSION |
|------|---|--------------------|
| | | → 2320 ⌠ top half integral |
| | | → 2321 ⌡ bottom half integral |
| 23AF | ⎯ | HORIZONTAL LINE EXTENSION |
| | | • used for extension of arrows |
| | | → 23D0 ⏐ vertical line extension |

**Bracket pieces**

| 23B0 | ⎰ | UPPER LEFT OR LOWER RIGHT CURLY BRACKET SECTION |
|------|---|------------------------------------------------|
| | | = left moustache |
| 23B1 | ⎱ | UPPER RIGHT OR LOWER LEFT CURLY BRACKET SECTION |
| | | = right moustache |

## Summation sign parts

23B2 ∑ SUMMATION TOP
23B3 ∑ SUMMATION BOTTOM
→ 2211 ∑ n-ary summation

## Horizontal brackets

*These characters are also used as delimiters of vertical text in non-CJK terminal emulation.*

23B4 ⎴ TOP SQUARE BRACKET
→ FE47 ﹇ presentation form for vertical left square bracket
23B5 ⎵ BOTTOM SQUARE BRACKET
→ FE48 ﹈ presentation form for vertical right square bracket
23B6 ⎶ BOTTOM SQUARE BRACKET OVER TOP SQUARE BRACKET
• only used for terminal emulation

## Terminal graphic characters

23B7 √ RADICAL SYMBOL BOTTOM
23B8 ⎸ LEFT VERTICAL BOX LINE
23B9 ⎹ RIGHT VERTICAL BOX LINE

## Scan lines for terminal graphics

*The scan line numbers here refer to old, low-resolution technology for terminals, with only 9 scan lines per fixed-size character glyph. Even-numbered scan lines are unified with box-drawing graphics.*

23BA ⎺ HORIZONTAL SCAN LINE-1
23BB ⎻ HORIZONTAL SCAN LINE-3
23BC ⎼ HORIZONTAL SCAN LINE-7
23BD ⎽ HORIZONTAL SCAN LINE-9

## Dentistry notation symbols

23BE ⎾ DENTISTRY SYMBOL LIGHT VERTICAL AND TOP RIGHT
→ 2308 ⌈ left ceiling
23BF ⎿ DENTISTRY SYMBOL LIGHT VERTICAL AND BOTTOM RIGHT
→ 230A ⌊ left floor
23C0 ⏀ DENTISTRY SYMBOL LIGHT VERTICAL WITH CIRCLE
23C1 ⏁ DENTISTRY SYMBOL LIGHT DOWN AND HORIZONTAL WITH CIRCLE
23C2 ⏂ DENTISTRY SYMBOL LIGHT UP AND HORIZONTAL WITH CIRCLE
23C3 ⏃ DENTISTRY SYMBOL LIGHT VERTICAL WITH TRIANGLE
23C4 ⏄ DENTISTRY SYMBOL LIGHT DOWN AND HORIZONTAL WITH TRIANGLE
23C5 ⏅ DENTISTRY SYMBOL LIGHT UP AND HORIZONTAL WITH TRIANGLE
23C6 ⏆ DENTISTRY SYMBOL LIGHT VERTICAL AND WAVE
23C7 ⏇ DENTISTRY SYMBOL LIGHT DOWN AND HORIZONTAL WITH WAVE
23C8 ⏈ DENTISTRY SYMBOL LIGHT UP AND HORIZONTAL WITH WAVE
23C9 ⏉ DENTISTRY SYMBOL LIGHT DOWN AND HORIZONTAL
→ 22A4 ⊤ down tack
→ 252C ┬ box drawings light down and horizontal

23CA ⏊ DENTISTRY SYMBOL LIGHT UP AND HORIZONTAL
→ 22A5 ⊥ up tack
→ 2534 ┴ box drawings light up and horizontal
23CB ⏋ DENTISTRY SYMBOL LIGHT VERTICAL AND TOP LEFT
→ 2309 ⌉ right ceiling
23CC ⏌ DENTISTRY SYMBOL LIGHT VERTICAL AND BOTTOM LEFT
→ 230B ⌋ right floor

## Miscellaneous technical

23CD ⏍ SQUARE FOOT

## Keyboard and UI symbols

23CE ⏎ RETURN SYMBOL
• may be shown with either hollow or filled glyph
→ 21B5 ↵ downwards arrow with corner leftwards
→ 2B90 ⮐ return left
23CF ⏏ EJECT SYMBOL
• UI symbol to eject media
~ 23CF FE0E text style
~ 23CF FE0F emoji style

## Special character extension

23D0 ⏐ VERTICAL LINE EXTENSION
• used for extension of arrows
→ 23AF ⎯ horizontal line extension

## Metrical symbols

23D1 ⏑ METRICAL BREVE
23D2 ⏒ METRICAL LONG OVER SHORT
23D3 ⏓ METRICAL SHORT OVER LONG
23D4 ⏔ METRICAL LONG OVER TWO SHORTS
23D5 ⏕ METRICAL TWO SHORTS OVER LONG
23D6 ⏖ METRICAL TWO SHORTS JOINED
23D7 ⏗ METRICAL TRISEME
→ 1D242 ᵈ combining greek musical triseme
23D8 ⏘ METRICAL TETRASEME
→ 1D243 ᵈ combining greek musical tetraseme
23D9 ⏙ METRICAL PENTASEME
→ 1D244 ᵈ combining greek musical pentaseme

## Electrotechnical symbols

23DA ⏚ EARTH GROUND
23DB ⏛ FUSE

## Horizontal brackets

*These are intended for bracketing terms of mathematical expressions where their glyph extends to accommodate the width of the bracketed expression*

23DC ⏜ TOP PARENTHESIS
→ FE35 ︵ presentation form for vertical left parenthesis
23DD ⏝ BOTTOM PARENTHESIS
→ FE36 ︶ presentation form for vertical right parenthesis
23DE ⏞ TOP CURLY BRACKET
→ FE37 ︷ presentation form for vertical left curly bracket
23DF ⏟ BOTTOM CURLY BRACKET
→ FE38 ︸ presentation form for vertical right curly bracket

23E0 ⎴ TOP TORTOISE SHELL BRACKET
→ FE39 ⎴ presentation form for vertical left tortoise shell bracket

23E1 ⎵ BOTTOM TORTOISE SHELL BRACKET
→ FE3A ⎵ presentation form for vertical right tortoise shell bracket

**Miscellaneous technical**

23E2 ⏢ WHITE TRAPEZIUM

**Chemistry symbol**

23E3 ◎ BENZENE RING WITH CIRCLE

**Miscellaneous technical**

23E4 — STRAIGHTNESS
23E5 ⏥ FLATNESS
23E6 ∿ AC CURRENT
23E7 ⚡ ELECTRICAL INTERSECTION
23E8 ₁₀ DECIMAL EXPONENT SYMBOL
• Algol-60 token for scientific notation literals

**User interface symbols**

23E9 ⏩ BLACK RIGHT-POINTING DOUBLE TRIANGLE
= fast forward

23EA ⏪ BLACK LEFT-POINTING DOUBLE TRIANGLE
= fast rewind

23EB ⏫ BLACK UP-POINTING DOUBLE TRIANGLE

23EC ⏬ BLACK DOWN-POINTING DOUBLE TRIANGLE

23ED ⏭ BLACK RIGHT-POINTING DOUBLE TRIANGLE WITH VERTICAL BAR
~ 23ED FE0E text style
~ 23ED FE0F emoji style

23EE ⏮ BLACK LEFT-POINTING DOUBLE TRIANGLE WITH VERTICAL BAR
~ 23EE FE0E text style
~ 23EE FE0F emoji style

23EF ⏯ BLACK RIGHT-POINTING TRIANGLE WITH DOUBLE VERTICAL BAR
~ 23EF FE0E text style
~ 23EF FE0F emoji style

23F0 ⏰ ALARM CLOCK
→ 231A ⌚ watch
→ 1F550 🕐 clock face one oclock
→ 1F570 🕰 mantelpiece clock

23F1 ⏱ STOPWATCH
~ 23F1 FE0E text style
~ 23F1 FE0F emoji style

23F2 ⏲ TIMER CLOCK
~ 23F2 FE0E text style
~ 23F2 FE0F emoji style

23F3 ⏳ HOURGLASS WITH FLOWING SAND
→ 231B ⌛ hourglass

23F4 ◀ BLACK MEDIUM LEFT-POINTING TRIANGLE
= reverse, back
• preferred to 25C0 ◀ black left-pointing triangle
→ 1F780 ◀ black left-pointing isosceles right triangle

23F5 ▶ BLACK MEDIUM RIGHT-POINTING TRIANGLE
= forward
• preferred to 25B6 ▶ black right-pointing triangle
→ 1F782 ▶ black right-pointing isosceles right triangle

23F6 ▲ BLACK MEDIUM UP-POINTING TRIANGLE
= increase
• preferred to 25B2 ▲ black up-pointing triangle
→ 1F781 ▲ black up-pointing isosceles right triangle

23F7 ▼ BLACK MEDIUM DOWN-POINTING TRIANGLE
= decrease
• preferred to 25BC ▼ black down-pointing triangle
→ 1F783 ▼ black down-pointing isosceles right triangle

23F8 ‖ DOUBLE VERTICAL BAR
= pause
→ 2016 ‖ double vertical line
~ 23F8 FE0E text style
~ 23F8 FE0F emoji style

23F9 ■ BLACK SQUARE FOR STOP
= stop
→ 25FC ■ black medium square
~ 23F9 FE0E text style
~ 23F9 FE0F emoji style

23FA ● BLACK CIRCLE FOR RECORD
= record
→ 26AB ● medium black circle
~ 23FA FE0E text style
~ 23FA FE0F emoji style

**Power symbols from ISO 7000:2012**

23FB ⏻ POWER SYMBOL
• IEC 5009 standby symbol
• IEEE 1621 power symbol

23FC ⏼ POWER ON-OFF SYMBOL
• IEC 5010 power on-off symbol

23FD ⏽ POWER ON SYMBOL
• use 2B58 ⭘ for power off symbol
→ 2B58 ⭘ heavy circle

**Power symbol from IEEE 1621-2004**

23FE ⏾ POWER SLEEP SYMBOL
→ 263E ☾ last quarter moon