

Miscellaneous Technical

Range: 2300–23FF

The Unicode Standard, Version 15.1

This file contains an excerpt from the character code tables and list of character names for *The Unicode Standard, Version 15.1*

This file may be changed at any time without notice to reflect errata, or other updates to the Unicode Standard. See <https://www.unicode.org/errata/> for an up-to-date list of errata.

See <https://www.unicode.org/charts/> for access to a complete list of the latest character code charts. See <https://www.unicode.org/charts/PDF/Unicode-15.1/> for charts showing only the characters added in Unicode 15.1. See <https://www.unicode.org/Public/15.1.0/charts/> for a complete archived file of character code charts for Unicode 15.1. See <https://www.unicode.org/charts/About.html#Conventions> for conventions used in these code charts, and other general information.

Disclaimer

These charts are provided as the online reference to the character contents of the Unicode Standard, Version 15.1 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 15.1, online at <https://www.unicode.org/versions/Unicode15.1.0/>, as well as Unicode Standard Annexes #9, #11, #14, #15, #24, #29, #31, #34, #38, #41, #42, #44, #45, and #50, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available online.

See <https://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.

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See <https://www.unicode.org/charts/fonts.html> for a list.

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	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	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	23FF

Miscellaneous technical

- 2300 ∅ DIAMETER SIGN
→ 00F8 ø latin small letter o with stroke
→ 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 v DOWN ARROWHEAD
→ 02C5 v modifier letter down arrowhead
→ 2228 v logical or
→ 2335 v 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 o'clock
- 231B ⌚ HOURGLASS
= alchemical symbol for hour

Quine corners

These form a set of four quine corners, for quincuncial arrangement. They are also used in upper and lower pairs in mathematics, 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
→ 2612 ⌨ ballot box with x
- 2328 ⌨ KEYBOARD
→ 1F5A6 ⌨ keyboard and mouse
→ 1F5AE ⌨ wired keyboard

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 8 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 Δ APL FUNCTIONAL SYMBOL DELTA STILE
 234C ⊓ APL FUNCTIONAL SYMBOL QUAD DOWN CARET
- 234D Δ 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 Δ 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 ø APL FUNCTIONAL SYMBOL JOT DIAERESIS
 = hoot
- 2365 ∅ APL FUNCTIONAL SYMBOL CIRCLE DIAERESIS
 = holler
- 2366 ∩ APL FUNCTIONAL SYMBOL DOWN SHOE STILE

2367	⌘	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	ι	APL FUNCTIONAL SYMBOL IOTA
2374	ρ	APL FUNCTIONAL SYMBOL RHO
2375	Ω	APL FUNCTIONAL SYMBOL OMEGA
2376	α	APL FUNCTIONAL SYMBOL ALPHA UNDERBAR
2377	ε	APL FUNCTIONAL SYMBOL EPSILON UNDERBAR
2378	ι	APL FUNCTIONAL SYMBOL IOTA UNDERBAR
2379	Ω	APL FUNCTIONAL SYMBOL OMEGA UNDERBAR
237A	α	APL FUNCTIONAL SYMBOL ALPHA

Graphics for control codes

237B	✓	NOT CHECK MARK • from ISO 2047 • symbol for Negative Acknowledge
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Miscellaneous technical

237C	⌘	RIGHT ANGLE WITH DOWNWARDS ZIGZAG ARROW
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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 → 2B21 ⌘ white hexagon

APL

2395	⌘	APL FUNCTIONAL SYMBOL QUAD → 2337 ⌘ apl functional symbol squish quad → 25AF ⌘ white vertical rectangle
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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.

- 23BA - HORIZONTAL SCAN LINE-1
- 23BB - HORIZONTAL SCAN LINE-3
 • scan line-5 is unified with the box-drawing graphic character 2500 —
- 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

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 ⏏ combining greek musical triseme
- 23D8 ⏏ METRICAL TETRASEME
 → 1D243 ⏏ combining greek musical tetraseme
- 23D9 ⏏ METRICAL PENTASEME
 → 1D244 ⏏ 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  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
= rewind, fast backwards

23EB  BLACK UP-POINTING DOUBLE TRIANGLE


23EC  BLACK DOWN-POINTING DOUBLE TRIANGLE

23ED  BLACK RIGHT-POINTING DOUBLE TRIANGLE WITH VERTICAL BAR
= skip to the end or next file/track/chapter

23EE  BLACK LEFT-POINTING DOUBLE TRIANGLE WITH VERTICAL BAR
= skip to the start or previous file/track/chapter





23EF  BLACK RIGHT-POINTING TRIANGLE WITH DOUBLE VERTICAL BAR
= play/pause toggle





23F0  ALARM CLOCK
→ 231A  watch
→ 1F550  clock face one o'clock
→ 1F570  mantelpiece clock





23F1  STOPWATCH





23F2  TIMER CLOCK



23F3  HOURGLASS WITH FLOWING SAND
→ 231B  hourglass



23F4  BLACK MEDIUM LEFT-POINTING TRIANGLE
= reverse, back
• preferred to 25C0  black left-pointing triangle
→ 2BC7  black medium left-pointing triangle centred
→ 1F780  black left-pointing isosceles right triangle



23F5  BLACK MEDIUM RIGHT-POINTING TRIANGLE
= forward
• preferred to 25B6  black right-pointing triangle
→ 2BC8  black medium right-pointing triangle centred
→ 1F782  black right-pointing isosceles right triangle

23F6  BLACK MEDIUM UP-POINTING TRIANGLE
= increase
• preferred to 25B2  black up-pointing triangle
→ 2BC5  black medium up-pointing triangle centred
→ 1F781  black up-pointing isosceles right triangle

23F7  BLACK MEDIUM DOWN-POINTING TRIANGLE
= decrease
• preferred to 25BC  black down-pointing triangle
→ 2BC6  black medium down-pointing triangle centred
→ 1F783  black down-pointing isosceles right triangle


23F8  DOUBLE VERTICAL BAR
= pause
→ 2016  double vertical line




23F9  BLACK SQUARE FOR STOP
= stop
→ 25FC  black medium square

23FA  BLACK CIRCLE FOR RECORD
= record
→ 26AB  medium black circle
→ 1F534  large red circle



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

Miscellaneous symbol

23FF  OBSERVER EYE SYMBOL