## **Miscellaneous Technical**

Range: 2300-23FF

This file contains an excerpt from the character code tables and list of character names for *The Unicode Standard, Version 16.0* 

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-16.0/ for charts showing only the characters added in Unicode 16.0. See https://www.unicode.org/Public/16.0.0/charts/ for a complete archived file of character code charts for Unicode 16.0. 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 16.0 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 16.0, online at https://www.unicode.org/versions/Unicode16.0.0/, as well as the Unicode Standard Annexes, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available online.

See https://www.unicode.org/ucd/ and https://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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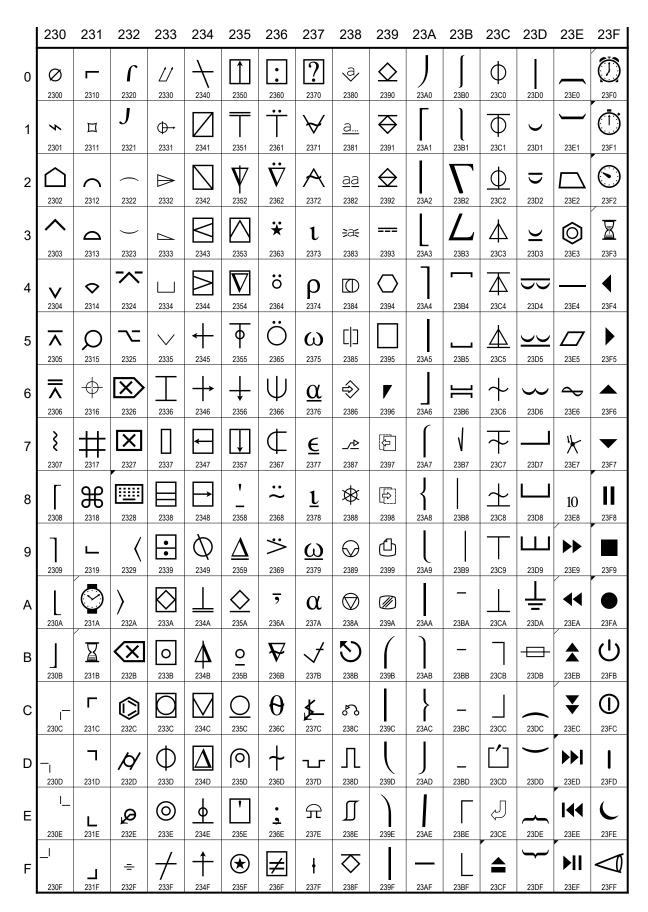
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Misce	llan	eous technical
2300	a	DIAMETER SIGN
	_	→ 00F8 ø latin small letter o with stroke
		→ 2205 Ø empty set
2301	*	ELECTRIC ARROW
		• from ISO 2047
		• symbol for End of Transmission
2302		
2303	^	UP ARROWHEAD
		→ 005E ^ circumflex accent
		→ 02C4 ^ modifier letter up arrowhead
		→ 2038 <sub>A</sub> caret
		$\rightarrow$ 2227 $\land$ logical and
2304	V	DOWN ARROWHEAD
		$\rightarrow$ 02C5 $^{\rm V}$ modifier letter down arrowhead
		→ 2228 v logical or
		→ 2335 ∨ countersink
2305	_	PROJECTIVE
		→ 22BC ⊼ nand
2306		PERSPECTIVE
2307	}	WAVY LINE
		→ 2E3E  wiggly vertical line
		→ 3030 V wavy dash
Ceilin	ıgs a	nd floors
These	char	acters are tall and narrow mathematical
delimi	iters,	in contrast to the quine corners or half bracke
		so distinct from CJK corner brackets, which ar
wido	nunta	ation marks

ackets. h are wide quotation marks.

2308	[	LEFT CEILING
		= APL upstile
		→ 2E22 <sup>r</sup> top left half bracket
		→ 300C 「left corner bracket
2309	1	RIGHT CEILING
		→ 20E7 a combining annuity symbol
		→ 2E23 <sup>1</sup> top right half bracket
230A		LEFT FLOOR
	-	= APL downstile
		→ 2E24 L bottom left half bracket
230B	- 1	RIGHT FLOOR
	-	→ 300D 」 right corner bracket
		→ 2E25 」 bottom right half bracket
Crops	5	
230C	_	BOTTOM RIGHT CROP
	'	• set of four "crop" corners, arranged facing
		outward
230D	5	BOTTOM LEFT CROP
230E	<u>'</u> '_	TOP RIGHT CROP
230F	J	TOP LEFT CROP
Misco	llane	eous technical
2310	_	REVERSED NOT SIGN

101 221 1 61101				
Miscellaneous technical				
REVERSED NOT SIGN				
= beginning of line				
→ 00AC ¬ not sign				
SQUARE LOZENGE				
= Kissen (pillow)				
<ul> <li>used as a command delimiter in some very old computers</li> </ul>				
$\rightarrow$ 2BCF $\mu$ rotated white four pointed cusp				
ARC				
= position of any line				

SEGMENT

 $\rightarrow$  25E0  $\cap$  upper half circle

= position of a surface

```
2314

    SECTOR
```

2315	Q	TELEPHONE RECORDER
2316	+	POSITION INDICATOR
		= true position

→ 2BD0 # square position indicator

# VIEWDATA SQUARE 2317

→ 22D5 # equal and parallel to

**ℋ PLACE OF INTEREST SIGN** 2318

= command key (1.0)

= operating system key (ISO 9995-7)

2319 🗀 **TURNED NOT SIGN** 

= line marker

## **User interface symbols**

231A 🖾 WATCH

 $\rightarrow$  23F0 0 alarm clock

→ 1F550 ② clock face one oclock

231B  $\overline{\mathbf{Z}}$ 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	Г	TOP LEFT CORNER	
		$\rightarrow$ 2E00 $^{\Gamma}$ right angle substitution marker	
		→ 2E22 <sup>r</sup> top left half bracket	
0015	_	TOO DIGUT CODUTE	

¬ TOP RIGHT CORNER 231D L BOTTOM LEFT CORNER 231E 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  $\rightarrow$  203F \_ undertie

## **Keyboard symbols**

2324 TUP ARROWHEAD BETWEEN TWO HORIZONTAL **BARS** = enter key

2325 ¬□ OPTION KEY

2326 

= delete to the right key

☒ X IN A RECTANGLE BOX 2327

= clear key

 $\rightarrow$  2612  $\boxtimes$  ballot box with x

2328 E KEYBOARD

→ 1F5A6 🗐 keyboard and mouse

→ 1F5AE im wired keyboard

2313

 $\bigcirc$ 

Deprecated angle brackets	2344	$\geq$	APL FUNCTIONAL SYMBOL QUAD GREATER-
These characters are deprecated and are strongly	0045		THAN
discouraged for mathematical use because of their canonical	2345	+	APL FUNCTIONAL SYMBOL LEFTWARDS VANE
equivalence to CJK punctuation.	2346	+	APL FUNCTIONAL SYMBOL RIGHTWARDS VANE
2329 〈 LEFT-POINTING ANGLE BRACKET	2347	$\leftarrow$	APL FUNCTIONAL SYMBOL QUAD LEFTWARDS ARROW
$\rightarrow$ 003C < less-than sign	2348	$\Box$	APL FUNCTIONAL SYMBOL QUAD
→ 2039 < single left-pointing angle quotation	2340		RIGHTWARDS ARROW
mark	2349	Ø	APL FUNCTIONAL SYMBOL CIRCLE BACKSLASH
→ 27E8 ( mathematical left angle bracket	20.0	4	→ 29B0 © reversed empty set
≡ 3008 < left angle bracket	234A	$\perp$	APL FUNCTIONAL SYMBOL DOWN TACK
232A > RIGHT-POINTING ANGLE BRACKET		_	UNDERBAR
→ 003E > greater-than sign			= up tack underbar
→ 203A > single right-pointing angle quotation mark			<ul> <li>preferred naming for APL tack symbols now follows the London Convention in ISO/IEC</li> </ul>
→ 27E9 〉 mathematical right angle bracket			tollows the London Convention in ISO/IEC
≡ 3009 > right angle bracket			13751:2000 (APL Extended)
	234B	4	→ 22A5 ⊥ up tack  APL FUNCTIONAL SYMBOL DELTA STILE
Keyboard symbol	234C	$\square$	APL FUNCTIONAL SYMBOL QUAD DOWN
232B	2040	LV.	CARET
	234D	$\Delta$	APL FUNCTIONAL SYMBOL QUAD DELTA
Chemistry symbol	234E	<u>—</u>	APL FUNCTIONAL SYMBOL DOWN TACK JOT
232C 🔘 BENZENE RING		_	= up tack jot
Drafting symbols			$\rightarrow$ 22A5 $\perp$ up tack
232D & CYLINDRICITY	234F	<u>+</u>	APL FUNCTIONAL SYMBOL UPWARDS VANE
232E 👂 ALL AROUND-PROFILE	2350	$\Box$	APL FUNCTIONAL SYMBOL QUAD UPWARDS
232F = SYMMETRY	0054	_	ARROW
2330 // TOTAL RUNOUT	2351	Т	APL FUNCTIONAL SYMBOL UP TACK OVERBAR  = down tack overbar
2331   → DIMENSION ORIGIN			→ 22A4 T down tack
2332 ⊳ CONICAL TAPER			$\rightarrow$ 3012 $\overline{T}$ postal mark
2333 ⊾ SLOPE	2352	$\nabla$	APL FUNCTIONAL SYMBOL DEL STILE
→ 25FA \subseteq lower left triangle	2353	$\dot{\wedge}$	APL FUNCTIONAL SYMBOL QUAD UP CARET
2334 □ COUNTERBORE		_	→ 2BB9 🖸 up arrowhead in a rectangle box
$\rightarrow$ 2423 $\perp$ open box	2354	$\nabla$	APL FUNCTIONAL SYMBOL QUAD DEL
2335 V COUNTERSINK	2355	<u></u>	APL FUNCTIONAL SYMBOL UP TACK JOT
→ 2304 <sub>v</sub> down arrowhead			= down tack jot
APL	0050		→ 22A4 T down tack
2336 APL FUNCTIONAL SYMBOL I-BEAM	2356	+	APL FUNCTIONAL SYMBOL DOWNWARDS VANE
2337 APL FUNCTIONAL SYMBOL SQUISH QUAD	2357	П	APL FUNCTIONAL SYMBOL QUAD
→ 2395 ☐ apl functional symbol quad	2001	¥	DOWNWARDS ARROW
→ 25AF [] white vertical rectangle → 2AFF [] n-ary white vertical bar	2358	•	APL FUNCTIONAL SYMBOL QUOTE UNDERBAR
2338 APL FUNCTIONAL SYMBOL QUAD EQUAL	2359	$\bar{\Delta}$	APL FUNCTIONAL SYMBOL DELTA UNDERBAR
2339 : APL FUNCTIONAL SYMBOL QUAD DIVIDE	235A	$\Diamond$	APL FUNCTIONAL SYMBOL DIAMOND
233A APL FUNCTIONAL SYMBOL QUAD DIAMOND			UNDERBAR
→ 26CB White diamond in square	235B	0	APL FUNCTIONAL SYMBOL JOT UNDERBAR
233B O APL FUNCTIONAL SYMBOL QUAD JOT	235C	0	APL FUNCTIONAL SYMBOL CIRCLE UNDERBAR
→ 29C7 o squared small circle	235D	P	APL FUNCTIONAL SYMBOL UP SHOE JOT
233C APL FUNCTIONAL SYMBOL QUAD CIRCLE	0055	П	→ 2A40 n intersection with dot
233D	235E	⊛	APL FUNCTIONAL SYMBOL QUOTE QUAD
233E ⊚ APL FUNCTIONAL SYMBOL CIRCLE JOT	235F	ͺ	APL FUNCTIONAL SYMBOL CIRCLE STAR  → 229B ⊗ circled asterisk operator
→ 229A ⊙ circled ring operator	2360	$\Box$	APL FUNCTIONAL SYMBOL QUAD COLON
→ 29BE ⊚ circled white bullet	2361	Ħ	APL FUNCTIONAL SYMBOL UP TACK DIAERESIS
233F $ extcolor{+}$ APL FUNCTIONAL SYMBOL SLASH BAR	2001	1	= down tack diaeresis
$\rightarrow$ 1019A $\neq$ roman as sign			→ 22A4 T down tack
2340 + APL FUNCTIONAL SYMBOL BACKSLASH BAR	2362	$\ddot{\nabla}$	APL FUNCTIONAL SYMBOL DEL DIAERESIS
→ 29F7 \ reverse solidus with horizontal stroke	2363	*	APL FUNCTIONAL SYMBOL STAR DIAERESIS
2341 APL FUNCTIONAL SYMBOL QUAD SLASH	2364	ö	APL FUNCTIONAL SYMBOL JOT DIAERESIS
→ 29C4 ✓ squared rising diagonal slash			= hoot
2342	2365	Ö	APL FUNCTIONAL SYMBOL CIRCLE DIAERESIS
→ 29C5 Squared failing diagonal stasm  2343 APL FUNCTIONAL SYMBOL QUAD LESS-THAN	0000	110	= holler
7010 G VII ET ONGHONAE STIMBOL GOVO FESS-LIVIA	2366	Ψ	APL FUNCTIONAL SYMBOL DOWN SHOE STILE

2367	lacktriangle	APL FUNCTIONAL SYMBOL LEFT SHOE STILE	238B	S	BROKEN CIRCLE WITH NORTHWEST ARROW
2368	∺	APL FUNCTIONAL SYMBOL TILDE DIAERESIS			= escape
		= smirk	238C	S	UNDO SYMBOL
2369	ゔ	APL FUNCTIONAL SYMBOL GREATER-THAN	Electi	oto	chnical symbols from IR 181
		DIAERESIS			•
236A	•	APL FUNCTIONAL SYMBOL COMMA BAR	238D	Л	MONOSTABLE SYMBOL
236B	$\nabla$	APL FUNCTIONAL SYMBOL DEL TILDE	238E		HYSTERESIS SYMBOL
236C	θ	APL FUNCTIONAL SYMBOL ZILDE	238F	$\Diamond$	OPEN-CIRCUIT-OUTPUT H-TYPE SYMBOL
236D	+	APL FUNCTIONAL SYMBOL STILE TILDE	2390	$\Diamond$	OPEN-CIRCUIT-OUTPUT L-TYPE SYMBOL
	1		2391	$\Rightarrow$	PASSIVE-PULL-DOWN-OUTPUT SYMBOL
236E	٠	APL FUNCTIONAL SYMBOL SEMICOLON	2392	$\Diamond$	PASSIVE-PULL-UP-OUTPUT SYMBOL
0005		UNDERBAR	2393		DIRECT CURRENT SYMBOL FORM TWO
236F	¥	APL FUNCTIONAL SYMBOL QUAD NOT EQUAL	2394	$\bigcirc$	SOFTWARE-FUNCTION SYMBOL
2370	?	APL FUNCTIONAL SYMBOL QUAD QUESTION	2334	$\cup$	
		→ 2BD1 ❖ uncertainty sign			→ 2B21 🔾 white hexagon
2371	$\forall$	APL FUNCTIONAL SYMBOL DOWN CARET	APL		
		TILDE	2395	П	APL FUNCTIONAL SYMBOL QUAD
2372	A	APL FUNCTIONAL SYMBOL UP CARET TILDE	2000	_	→ 2337 apl functional symbol squish quad
2373	ι	APL FUNCTIONAL SYMBOL IOTA			→ 25AF \( \) white vertical rectangle
2374	ρ	APL FUNCTIONAL SYMBOL RHO			_
2375	ω	APL FUNCTIONAL SYMBOL OMEGA	Keyb	oard	symbols from ISO 9995-7
2376	α	APL FUNCTIONAL SYMBOL ALPHA UNDERBAR	2396	•	DECIMAL SEPARATOR KEY SYMBOL
2377	€	APL FUNCTIONAL SYMBOL EPSILON	2397	ē	PREVIOUS PAGE
2011	_	UNDERBAR			→ 1F519 🔤 back with leftwards arrow above
2378	ι	APL FUNCTIONAL SYMBOL IOTA UNDERBAR	2398	4	NEXT PAGE
2379	ω	APL FUNCTIONAL SYMBOL OMEGA UNDERBAR	2399	<u></u>	PRINT SCREEN SYMBOL
237A	_		239A	<b>Ø</b>	CLEAR SCREEN SYMBOL
231A	α	APL FUNCTIONAL SYMBOL ALPHA	200/	<b>(</b>	
Grapl	hics 1	for control codes			→ 20E2  combining enclosing screen
237B	ℐ	NOT CHECK MARK	Brack	et p	ieces
		• from ISO 2047	239B		LEFT PARENTHESIS UPPER HOOK
		• symbol for Negative Acknowledge	239C		LEFT PARENTHESIS EXTENSION
NA:		-	239D	(	LEFT PARENTHESIS LOWER HOOK
		eous technical	239E	ì	RIGHT PARENTHESIS UPPER HOOK
237C	≰	RIGHT ANGLE WITH DOWNWARDS ZIGZAG	239F	ı	RIGHT PARENTHESIS EXTENSION
		ARROW	23A0	j	RIGHT PARENTHESIS LOWER HOOK
Grapl	hics	for control codes	23A1	ŕ	LEFT SQUARE BRACKET UPPER CORNER
237D	7.5	SHOULDERED OPEN BOX	23A2	ł	LEFT SQUARE BRACKET EXTENSION
_0	_	• from ISO 9995-7	23A3	1	LEFT SQUARE BRACKET LOWER CORNER
		• keyboard symbol for No Break Space	23A4	ነ	RIGHT SQUARE BRACKET UPPER CORNER
		→ 2423 _ open box			
237E	$\widehat{\pi}$	BELL SYMBOL	23A5		RIGHT SQUARE BRACKET EXTENSION
231 E	π		23A6	Ţ	RIGHT SQUARE BRACKET LOWER CORNER
0075		• from ISO 2047	23A7		LEFT CURLY BRACKET UPPER HOOK
237F	ł	VERTICAL LINE WITH MIDDLE DOT	23A8	{	LEFT CURLY BRACKET MIDDLE PIECE
		• from ISO 2047	23A9	l	LEFT CURLY BRACKET LOWER HOOK
		<ul> <li>symbol for End of Medium</li> </ul>	23AA	ſ	CURLY BRACKET EXTENSION
Kevb	oard	symbols from ISO 9995-7	23AB	Ì	RIGHT CURLY BRACKET UPPER HOOK
2380	a,	INSERTION SYMBOL	23AC	}	RIGHT CURLY BRACKET MIDDLE PIECE
2381	~		23AD	İ	RIGHT CURLY BRACKET LOWER HOOK
	-				
2382	<u>a</u>	CONTINUOUS UNDERLINE SYMBOL			
2382	<u>aa</u>	DISCONTINUOUS UNDERLINE SYMBOL	Speci	al ch	naracter extensions
2383	<u>aa</u>	DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL		al ch	naracter extensions INTEGRAL EXTENSION
2383 2384	<u>aa</u> ;≈∈	DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL	Speci	al ch	naracter extensions INTEGRAL EXTENSION  → 2320 ſ top half integral
2383	<u>aa</u>	DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE	Speci	al ch	naracter extensions INTEGRAL EXTENSION
2383 2384 2385	<u>aa</u> ;≈ [D]	DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center	Speci	al ch	naracter extensions INTEGRAL EXTENSION  → 2320 ſ top half integral
2383 2384 2385 2386		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL	<b>Speci</b> 23AE	I	naracter extensions INTEGRAL EXTENSION  → 2320 ∫ top half integral  → 2321 ∫ bottom half integral
2383 2384 2385 2386 2387		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL ALTERNATIVE KEY SYMBOL	<b>Speci</b> 23AE	I	naracter extensions INTEGRAL EXTENSION  → 2320 ∫ top half integral  → 2321 ∫ bottom half integral  HORIZONTAL LINE EXTENSION
2383 2384 2385 2386		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL ALTERNATIVE KEY SYMBOL HELM SYMBOL	Speci 23AE 23AF	  -	naracter extensions INTEGRAL EXTENSION  → 2320 ∫ top half integral  → 2321 ∫ bottom half integral  HORIZONTAL LINE EXTENSION  • used for extension of arrows  → 23D0   vertical line extension
2383 2384 2385 2386 2387		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL ALTERNATIVE KEY SYMBOL HELM SYMBOL = control	Speci 23AE 23AF Brack	  -	aracter extensions  INTEGRAL EXTENSION  → 2320 ∫ top half integral  → 2321 ∫ bottom half integral  HORIZONTAL LINE EXTENSION  • used for extension of arrows  → 23D0   vertical line extension  ieces
2383 2384 2385 2386 2387 2388		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL ALTERNATIVE KEY SYMBOL HELM SYMBOL = control → 2638  wheel of dharma	Speci 23AE 23AF	  -	aracter extensions  INTEGRAL EXTENSION  → 2320 ∫ top half integral  → 2321 ∫ bottom half integral  HORIZONTAL LINE EXTENSION  • used for extension of arrows  → 23D0   vertical line extension  ieces  UPPER LEFT OR LOWER RIGHT CURLY BRACKET
2383 2384 2385 2386 2387		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL ALTERNATIVE KEY SYMBOL HELM SYMBOL = control → 2638 � wheel of dharma CIRCLED HORIZONTAL BAR WITH NOTCH	Speci 23AE 23AF Brack	  -	TABLE TO BE LEFT OR LOWER RIGHT CURLY BRACKET  Data Table To Bracke
2383 2384 2385 2386 2387 2388		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL ALTERNATIVE KEY SYMBOL HELM SYMBOL = control → 2638 � wheel of dharma CIRCLED HORIZONTAL BAR WITH NOTCH = pause	Speci 23AE 23AF Brack 23B0	  -	INTEGRAL EXTENSION  → 2320 ∫ top half integral  → 2321 ∫ bottom half integral  HORIZONTAL LINE EXTENSION  • used for extension of arrows  → 23D0   vertical line extension  ieces  UPPER LEFT OR LOWER RIGHT CURLY BRACKET SECTION  = left moustache
2383 2384 2385 2386 2387 2388		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL ALTERNATIVE KEY SYMBOL HELM SYMBOL = control → 2638 � wheel of dharma CIRCLED HORIZONTAL BAR WITH NOTCH = pause CIRCLED TRIANGLE DOWN	Speci 23AE 23AF Brack	  -	INTEGRAL EXTENSION  → 2320 ∫ top half integral  → 2321 ∫ bottom half integral  HORIZONTAL LINE EXTENSION  • used for extension of arrows  → 23D0   vertical line extension  ieces  UPPER LEFT OR LOWER RIGHT CURLY BRACKET  SECTION  = left moustache  UPPER RIGHT OR LOWER LEFT CURLY BRACKET
2383 2384 2385 2386 2387 2388		DISCONTINUOUS UNDERLINE SYMBOL EMPHASIS SYMBOL COMPOSITION SYMBOL WHITE SQUARE WITH CENTRE VERTICAL LINE = center ENTER SYMBOL ALTERNATIVE KEY SYMBOL HELM SYMBOL = control → 2638 � wheel of dharma CIRCLED HORIZONTAL BAR WITH NOTCH = pause	Speci 23AE 23AF Brack 23B0	  -	INTEGRAL EXTENSION  → 2320 ∫ top half integral  → 2321 ∫ bottom half integral  HORIZONTAL LINE EXTENSION  • used for extension of arrows  → 23D0   vertical line extension  ieces  UPPER LEFT OR LOWER RIGHT CURLY BRACKET SECTION  = left moustache

# Summation sign parts 23B2 SUMMATION TOP 23B3 SUMMATION BOTTOM

 $\rightarrow$  2211  $\sum$  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	Γ	DENTISTRY SYMBOL LIGHT VERTICAL AND TOP
		RIGHT

 $\rightarrow$  2308  $\lceil$  left ceiling

23C1 To DENTISTRY SYMBOL LIGHT DOWN AND HORIZONTAL WITH CIRCLE

23C2 

DENTISTRY SYMBOL LIGHT UP AND HORIZONTAL WITH CIRCLE

23C3 A DENTISTRY SYMBOL LIGHT VERTICAL WITH TRIANGLE

23C4 A 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 To DENTISTRY SYMBOL LIGHT DOWN AND HORIZONTAL WITH WAVE

23C8  $\pm$  DENTISTRY SYMBOL LIGHT UP AND HORIZONTAL WITH WAVE

23C9 T DENTISTRY SYMBOL LIGHT DOWN AND HORIZONTAL

 $\rightarrow$  22A4 T down tack

→ 252C — box drawings light down and horizontal

23CA \_\_ DENTISTRY SYMBOL LIGHT UP AND HORIZONTAL

 $\rightarrow$  22A5  $\perp$  up tack

 $\rightarrow$  2534  $\stackrel{\perp}{\perp}$  box drawings light up and horizontal

23CB The Dentistry symbol light vertical and top left.

→ 2309 ] right ceiling

23CC J DENTISTRY SYMBOL LIGHT VERTICAL AND BOTTOM LEFT

→ 230B | right floor

## Miscellaneous technical

23CD 🗀 SOUARE FOOT

## **Keyboard and UI symbols**

23CE PRETURN SYMBOL

 may be shown with either hollow or filled glyph

→ 21B5 → downwards arrow with corner leftwards

→ 2B90 ← return left

• UI symbol to eject media

## **Special character extension**

23D0 | VERTICAL LINE EXTENSION

used for extension of arrows

→ 23AF — horizontal line extension

## **Metrical symbols**

23D4 SMETRICAL LONG OVER TWO SHORTS
23D5 SMETRICAL TWO SHORTS OVER LONG

23D6 — METRICAL TWO SHORTS JOINED

→ 1D242 documents 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 ہے 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 MHITE TRAPEZIUM

## **Chemistry symbol**

23E3 

BENZENE RING WITH CIRCLE

## Miscellaneous technical

23E4 — STRAIGHTNESS 23E5 / FLATNESS

23E6 ← AC CURRENT

Algol-60 token for scientific notation literals

## **User interface symbols**

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

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 M BLACK LEFT-POINTING DOUBLE TRIANGLE WITH VERTICAL BAR

= skip to the start or previous file/track/chapter

23EF MI BLACK RIGHT-POINTING TRIANGLE WITH DOUBLE VERTICAL BAR

= play/pause toggle

23F0 🖄 ALARM CLOCK

→ 231A ② watch

ightarrow 1F550  $\odot$  clock face one oclock

→ 1F570 🕰 mantelpiece clock

23F1 ① STOPWATCH

23F2 S TIMER CLOCK

23F3 X HOURGLASS WITH FLOWING SAND

→ 231B 🛮 hourglass

23F4 ■ BLACK MEDIUM LEFT-POINTING TRIANGLE

= reverse, back

 $\bullet$  preferred to 25C0  $\blacktriangleleft$  black left-pointing triangle

→ 2BC7 ◀ black medium left-pointing triangle centred

→ 1F780 **d** black left-pointing isosceles right triangle

#### 

= forward

 preferred to 25B6 ► black right-pointing triangle

→ 2BC8 ► black medium right-pointing triangle centred

→ 1F782 black right-pointing isosceles right triangle

## 23F6 A 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 II DOUBLE VERTICAL BAR

= pause

→ 2016 | double vertical line

23F9 ■ BLACK SOUARE 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 ① POWER ON-OFF SYMBOL

• IEC 5010 power on-off symbol

23FD I POWER ON SYMBOL

• use 2B58 O for power off symbol

 $\rightarrow$  2B58 O heavy circle

## Power symbol from IEEE 1621-2004

23FE C POWER SLEEP SYMBOL

→ 263E 《 last quarter moon

## Miscellaneous symbol

23FF < ☐ OBSERVER EYE SYMBOL