D. Tables

Table 1 Units with special names and symbols[1]

ALL VALUES DECIMAL

Unit Category		Dimension	The Universal Unit Systems			
			with the Rydberg constant(u)		Harmonic System (±)	
Coherent	base units that are not natural units	length	um	272.102883 mm	±h [2]	272.352206 mm
		time	us	390.267520 ms	±n	390.625115 ms
		energy	uJ	64.143275 mJ	±J	64.084556 mJ
		temperature [3]	uK	58.441041 μK	±K	58.387542 μK
	base units that are natural units	plane angle	rad	(2/π) arc sin(1)		
		logarithm	neper	log(e)		
		amount of substance	ℏmol or N_A^{-1}	mol / 6.02214076×10.[23.] In this context 'ℏ' is equivalent to '3-' and ℏmol is called 'natural mol.'		
		impedance	ℏΩ or Z_P	29.979245796 Ω (=1sr/($\varepsilon_0 c_0$) [4]) ℏΩ is called 'natural ohm' or more simply 'nohm.'		
	derived units of electromagnetic quantities	charge	±C	28.896578 mC (may be called 'universal Coulomb' (or 'Clio' [6]))		
		electric current	uA	74.043001 mA	±A	73.975219 mA
		field strength	uE [5,6]	272.113988 mA/m	±E	271.616007 mA/m
		flux density	uT	390.283447 mC/m²	±T	389.569211 mC/m²
	derived units of dynamical quantities	mass	ug	131.950082 g	±l (x006C)	131.829289 g
		power	uW	164.357196 mW	±W	164.056415 mW
		force	uN	235.731701 mN	±N	235.300301 mN
		Pressure	uP	3.183843 Pa	±P	3.172201 Pa

[1] Please see also https://github.com/suchowan/a_converter/blob/master/doc/dozenal_com/univunit-e.pdf for details. A web-based unit converter is available at http://hosi.org/cgi-bin/conv.cgi . This converter also teaches us the representation of units that belong to various unit systems.

[2] 'harmon'(±h), 'nic'(±n), 'looloh'[8](±l, 'l' can also be a cursive 'ℓ' (x2113), the suffix 'h' representing the Harmonic System's identity), and 'nohm'(ℏΩ) constitutes a quartet.

[3] The unit of thermodynamic temperature has been changed. The new unit is one-1,0000;[th] of the old unit in the paper http://dozenal.com along with the introduction of the Earth local extension.

[4] If we adopt the elementary charge as one of the definition constants, ±Ω is used in substitution for ℏΩ.

[5] See electromagnetic units in §3.2.2 of the paper http://dozenal.com, and https://github.com/suchowan/a_converter/blob/master/doc/dozenal_com/electromagnetism.pdf .

[6] The unit symbol E (Ørsted) is associated with the CGS system. In this paper, we adopt metric unit names based on the scientists' names as is.

However, under the Harmonic System, an alternative proposal suggests replacing these units with the names of Muses bearing the same initials — namely, **N**ewton→**Nete**, **P**ascal→(Polymnia→)**Polym**, **C**oulomb→**Clio**, **A**mpere→**Aoide**, **Ø**rsted→**Erato**, **T**esla→**Thalia**, and **K**elvin→**Kalliope**. Notably, Polym derives from Polymnia, the Muse of sacred song; a lute piece titled Polymnia was composed by Vincenzo Galilei (father of Galileo), symbolically linking musical and scientific traditions of harmonic proportion. This proposal has two advantages: (1) it does not honor any individual, and (2) it allows the omission of redundant 'harmonic' terms. The unit converter for this proposal is available at http://hosi.org/cgi-bin/conv_muse.cgi.

This proposal also renames units for which no corresponding Muse is found, such as **J**oule→**Juno**, **W**att →(Walküre→)**Walku**, **naper**→(Nephelē→)**nephe**, **dirac**→**diana**, and **Ω**hm→**Ω**(**Omega**). Since no suitable Muse exists for Joule, Watt, or naper, the proposal instead borrows names from Roman, Norse, and Greek mythology. Moreover, because of the electromagnetic symmetry required to pair ℏΩ and Ω_2 (see the 3rd part of p. 20), 'Ω (Omega)' is adopted without a Muse equivalent.

Non-coherent	defining constants	wave number	R_∞	10,973,731.568157/m (is called 'Rydberg')
		velocity	c_0 or ɬ γ	299,792,458 m/s (defined, and is called 'light')
		action	$\hbar$	$6.62607015\times10.^{-34}$Js/$2\pi$ (is called 'quantum')
		heat capacity	k_B	$1.380649\times10.^{-23}$J/K (is called 'Boltzmann')
	supplementary constants	the total solid angle of a hypersphere	Ω_k	$\frac{2\pi^{\frac{k+1}{2}}}{\Gamma(\frac{k+1}{2})}$ rad^k k=0,1, 2 Ω_0=2 $\Omega_1=2\pi$ rad (is called 'cycle') $\Omega_2=4\pi$ sr (is called 'turn')
		logarithm of an integer	$\eth_k$	$\log(2^k)$ k=1(bit), z(figure), 4(nibble), 8(byte), .. z=$\log_2$(12.)
		amount of substance	±mol	132.007620 mol (=$12.^{24.}/N_A$) (±mol may be called 'universal mol')
		elementary charge	e	$1.6021766340\times10.^{-19}$C ($e$ is called 'electron') (=$\sqrt{\frac{\alpha\hbar}{\Omega_n}}$)

Table 2 Physical, material and astronomical constants[7]

ALL VALUES DOZENAL

Constant Symbols and Name (UNDERLINE INDICATES CONSTANT MAINTAINS SAME VALUE BETWEEN SYSTEMS u AND h)		Constant Value expressed by the Universal Unit Systems		Exponent N of× 10;^{N}	Unit Symbol (u and h prefixes omitted)
		with the Rydberg constant (u)	Harmonic System (h)		
R_∞	Rydberg constant	1	1;00170000	6;	Ω_1/m
c_0	the speed of light in vacuum	1		8;	m/s
$\hbar$	quantum of action	1		-26;	J s
k_B	Boltzmann constant	1		-20;	J/K
N_A	Avogadro constant	1		20;	mol^{-1}
R	gas constant	1		0;	J/(mol K)
u	unified atomic mass unit	1;00090610	1;00240733	-20;	g [8]
a_B	Bohr Radius	1;005E85684	1;00447X74	-9;	m
α	fine structure constant	1;0739940472		-2;	-
e	elementary charge	1;0374439E14 [9]		-14;	C
m_e	electron mass	0;E4692217E0	0;E48324X245	-23;	g

[7] If CODATA (2022) values are required, see http://physics.nist.gov/cuu/Constants/index.html .

[8] Because ug is approximately 100;[10;] u, I add dedicated name 'looloh'(lú:loʊ/əʊ, ±l) to mass unit of the Harmonic System.

[9] This value equals 12.√α and matches the ratio 41. : 40. within an error of 0.009 %. The ratio 41. : 40. is termed the Fine Harmonic Ratio, named after the fine-structure constant α.

σ	Stefan-Boltzmann constant	1;E82E28		-1E;	W/(m^{2}K^4)
m_G	gravitic meter ($\sqrt{2E}$; l_P)	1;00186	1;00016	-27;	m
l_P	Planck length	2;0445E	2;04134	-28;	m
F_P	Planck force ($\hbar c_0/ l_P^2$)	2;XE206	2;XEE32(≒ 2;E)[10]	35;	N
G	Newtonian constant of gravitation (c_0^4/F_P)	4;15768	4;14663	-X;	(m^4/s^4)/N
θ_W	weak mixing angle	E;304		-2;	Ω_1
V_m	molar volume of an ideal gas under standard conditions	1;02X469	1;025665	2;	m^3/mol
	black-body radiation at the ice point	0;EX2466	0;EX8784	2;	W/m^2
	maximum density of water	1;088183	1;092X47 (≒ 15;/14;)	2;	g/m^3
	density of ice at the ice point	0;E7E9	0;E85E	2;	g/m^3
	specific heat of water[11]	0;6052	0;6045 (≒ 1/2)	0;	J/(g K)
	surface tension of water at 25°C	0;EE68	0;EEE4	-1;	N/m
atm	standard atmosphere	1;65008E	1;659967 (≒ 1;66)	4;	P
g_n	standard gravitational acceleration	5;5X54XE9	5;5E21264 (≒ E;/2)	0;	m/s^2
r_E	gravitational radius of Earth	2;41E8982X0X	2;418030652	-2;	m
au	astronomical unit	8;X67575535	8;X55509X31	X;	m
	astronomical unit	9;E91731X53		-3;	c_0 s_E day

Table 3 Power prefixes

name	symbol	TEX text	value	name	symbol	TEX text	value
dirac [12]	𐑛	dirac	10;				
hyper	♯ (x266F)	hyper	**10;^{4}**	**sub**	♭ (x266D)	sub	**10;$^{-4}$**
cosmic	+	_+	**10;^{8}(=U)**	**atomic**	-	_-	**U^{-1}**
di-cosmic	2+	_{2+}	U^2	di-atomic	2-	_{2-}	U^{-2}
ter-cosmic	3+	_{3+}	U^3	ter-atomic	3-	_{3-}	U^{-3}
tetra-cosmic	4+	_{4+}	U^4	tetra-atomic	4-	_{4-}	U^{-4}
penta-cosmic	5+	_{5+}	U^5	penta-atomic	5-	_{5-}	U^{-5}
hexa-cosmic	6+	_{6+}	U^6	hexa-atomic	6-	_{6-}	U^{-6}
hepta-cosmic	7+	_{7+}	U^7	hepta-atomic	7-	_{7-}	U^{-7}

[10] If this is expressed as 2;E, the error from CODATA (2018) becomes -6;61(-6.51) times standard deviation.

[11] This corresponds to the definition of the thermodynamic calorie.

[12] 'dirac' is only used when expressing the unit of the Gravitic System with the Harmonic System. (i.e., gravitic meter = tetra-atomic dirac harmon, gravitic second = penta-atomic dirac nic, gravitic gram = atomic dirac looloh)

Table 4 Examples of natural scale quantity representation [13]

quantity	symbol	value	refer to
2E; penta-cosmic Newton	2E;$_{5+}$N	2E;×U^{5} [harmonic] Newton	the Planck force
6;di-cosmic nic	6; $_{2+}$n	6;×U^{2} [harmo]nic[second]	the age of the universe
cosmic hyper bit [Boltzmann]	$_{+\#}$ℴ$_{1}$[k_{B}]	U$^{1.\cdot.4}$log2^{1} [Boltzmann]	1.01 Tera Byte(=$2^{43.}$bit)
cosmic harmon	$_{+}$h	U^{1} harmon[ic meter]	the speed of light in vacuum
ato[mic]l[ight]	$_{-}$γ	harmon[ic meter]/ [harmo]nic[second]	U^{-1}light(≒2.51 km / hour)
atomic unino[ ]h[armon]	1; ′[0]-h [14]	U$^{-1.\cdot.1}$ harmon[ic meter]	the Bohr radius
di-atomic Coulomb	$_{2-}$C	U^{-2} [universal] Coulomb	the elementary charge
di-atomic effective Watt [15]	$_{2-}$W̄	U^{-2}[harmonic]effective Watt	a photon power (540.THz)
ter-atomic looloh	$_{3-}$l	U^{-3} looloh	the unified atomic mass unit
2; tetra-atomic harmon	2; $_{4-}$h	2;×U^{-4} harmon[ic meter]	the Planck length

Table 5 The Earth local extension for the Harmonic Universal Unit System

category		name / description	symbol	plain text	value
Non-coherent calendar time	units	year month	☼̃(x263C) ℑ(x263D)	year month	☼̃ =365.days 31.nodus (265; ˜ 27; ☆̃) ℑ =10; $^{-1}$ ☼̃
		day unino day dino day terno day (tertiary 12 divisions of one day)	˚(x00B0) ˜(x2032) ¨(x2033) ⃛(x2034)	day unitia ditia tertia	Ω$_{1}$=1˚ =10;˜ =100; ¨ =1000; ⃛ [14] 'day' corresponds to 86,400. s at the beginning of year 1900. **Each calendar time unit symbol is distinguished from existing systems by adding a tilde** ("~",x0303) or by **superscripting** the symbol itself.
		nodus terno nodus→terno n$_{(odus)}$→ternon hexaon nodus→hex$_{(a)O(n)}$ n$_{(odus)}$→hexon	☆̃(x2606) ▽̃(x25BD) ⬡̃(x232C)	nodus ternon hexon	˚ =2^{+7} ☆̃ ▽̃ =10;$^{-3}$ ☆̃ ⬡̃ =2^{+6} ☼̃ =1;003628×10;$^{+6}$ ☆̃
Non-coherent unit and constants		difference between thermodynamic temperature and $\boldsymbol{T}_{\mathbf{E}}$(=118,2354; ±K (-74.36°C,-101.85°F)) approximate formula: ℃ = 1E;/17;°H-62;4 ; °H = 17;/1E;℃ + 51;5	**°H**	deg H	1,0000; ±K(≒1.210724 K ≒ 23./19. K) 100; 0000°H is 99.9839 °C 78;0000°H is 37.0262°C 61;0000°H is 14.0224°C 51;5026°H is 0.0000°C 99.9839 °C is the boiling point of water at the standard atmosphere.
	supple-mentary constants	the gravitational acceleration of the Earth (is called 'gee [of Earth] ')	$\boldsymbol{g}_{\mathbf{E}}$	g_E or gee	5;611X615 harmon/nic^{2} g_{E} is defined as $c_0^2 r_{\mathrm{E}}(m_{\mathrm{E}}$ rad$)^{-2}$
		the rotation period of the Earth (is called '[Earth] solar') at the beginning of year 1900.	$\boldsymbol{s}_{\mathbf{E}}$	s_E or solar	0;EEEEEE15336X nic/ ternon (=86400 s /Ω$_{1}$) (This should be 'coordinated'.)
		the meridian length of the Earth (is called '[Earth] meridian')	$\boldsymbol{m}_{\mathbf{E}}$	m_E or meridian	4124,216E; harmon/Ω$_{1}$

[13] The part enclosed with'[]' can be omitted in Table 4 and Table 5.

[14] This is the notation explained at the end of Appendix C.

W̄ corresponds to 1;di-cosmic photon energy(540.THz) / nic and 115.667212 lumen.

[15] Units for quantity weighted by dimensionless human sensitivity are indicated by 'effective' and symbolled by overline.

W̄ corresponds to 1;di-cosmic photon energy(540.THz) / nic and 115.667212 lumen.