

Unicode request for three musical symbols

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This request is for Arnold Schoenberg's (1874–1951) stress and unstress symbols and the modern *longa* rest.

Thanks to the International Music Score Library Project (<https://imslp.org>) for facilitating access to public-domain music scores.

Characters

The proposed characters, along with their PUA points in the Standard Music Font Layout (SMuFL) specification, are:

- ◌ 1D127 MUSICAL SYMBOL COMBINING STRESS [SMuFL U+E4B6.] Figures 1–6.
- ◌ 1D128 MUSICAL SYMBOL COMBINING UNSTRESS [SMuFL U+E4B8.] Figures 1–6.
- ⌘ 1D1FF MUSICAL SYMBOL LONGA REST [SMuFL U+E4E1.] Figures 7–29.

Properties

For consistency with the musical articulation marks 1D17B–1D182, where CCC = 220, the CCC value of the combining stress and unstress marks also needs to be 220. There will otherwise be complications when these combine, as they do in Figures 2–4.

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1D127;MUSICAL SYMBOL COMBINING STRESS;Mn;220;NSM;;;;;N;;;;;
1D128;MUSICAL SYMBOL COMBINING UNSTRESS;Mn;220;NSM;;;;;N;;;;;
1D1FF;MUSICAL SYMBOL LONGA REST;So;0;L;;;;;N;;;;;
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Annotations

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1D127 MUSICAL SYMBOL COMBINING STRESS
  → U+0301 COMBINING ACUTE ACCENT
1D128 MUSICAL SYMBOL COMBINING UNSTRESS
  → U+0306 COMBINING BREVE
1D1FF MUSICAL SYMBOL LONGA REST
  = quadruple whole-rest
  → U+1D1C2 MUSICAL SYMBOL LONGA IMPERFECTA REST
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Chart

Dark grey cells are already assigned. Together with our other proposals (figured bass and Stein-Zimmermann accidentals, light grey cells), this completes the Musical Symbols block.

Musical Symbols

1D100

1D1FF

	1D10	1D11	1D12	1D13	1D14	1D15	1D16	1D17	1D18	1D19	1D1A	1D1B	1D1C	1D1D	1D1E	1D1F
0		☾		#		◁				<i>m</i>				⋮	⋮	⋮
1		☾		#		◁				<i>f</i>						#
2		'		#		◻					<i>c</i>			⊥	⋮	#
3		//		b	x	◼)	∩		⊥	⊥	♩
4	⋮	{		<i>c</i>	+	▽				♩)	⊙	·	⋮	⊥	♩
5		(<i>c</i>	⊗	▽				♩)	⊙	·	⊥	⊥	♩
6	:	—		8 ^{va}	◻	()	*			<i>tr</i>	⊥	⊥	·	⋮	⊥	♩
7	:	==		8 ^{vb}	■	◊	—			∞	⊥	⊥	⊙	⊥	⊥	4
8	:	≡		15 ^{ma}	△	●	=			∞	⊥	⊥	⊙	⋮	⊥	4
9	<i>ds.</i>	≡		15 ^{mb}	▲		=			∞	·	◇	⊙	⊥	#	5 ⁺
A	<i>dc.</i>	≡	⊗	⊥	◁		—			∞	⊙	◆	⊙	⊥	⊥	6
B	⊗	≡		—	◁		=	>		⊥		⊥	<i>c</i>	⋮	⋮	7
C	⊙		b	—	◁		≡	.	·	⋮		⊥	⊙	⊥	#	9
D	/		b	⋮	◁	◊	◊	—	<i>s</i>	⋮	⊥		⊙	⋮	⊥	5
E	⊗		b	⋮	▽	♩	⋮	.	<i>z</i>)	<i>scd.</i>		⊙	♩	⊥	7
F	//		b	⋮	▽	♩	⋮	▽	<i>p</i>)	*		*	∞	⋮	

Background

Stress marks

Arnold Schoenberg (1874–1951) borrowed the acute-and-breve notation from scansion in poetry to represent stressed and unstressed notes that contradict the meter, a convention that has since become standard (Gould, p. 115).

These symbols behave like articulation marks in that they can appear either under or over a note, and they are stylised to fit with the other musical symbols. The combining staccato (U+1D17C), tenuto (U+1D17D), and marcato (U+1D17F) are already disunified from the visually similar combining dot above (U+0307) or dot below (U+0323), overline (U+0305) and circumflex (U+0302). Because Schoenberg's symbols have the same behaviour, they should be similarly disunified from U+0301 COMBINING ACUTE ACCENT, U+0306 COMBINING BREVE, U+0317 COMBINING ACUTE ACCENT BELOW and U+032E COMBINING BREVE BELOW.

When placed under a note, the acute and breve may be inverted, as seen in Figure 6. This inversion is optional, as evidenced by Gould's standard treatment shown in Figure 2.

Longa rest

Unlike shorter notes, the *longa* and *maxima* did not survive the transition from mensural notation to common Western music notation (CMN), and they do not have a standard modern form. Their main appearance today is in theoretical works and in modernised editions of early music that used mensural notation. In such cases the standard solution is to borrow the mensural glyphs U+1D1B6  and U+1D1B7  into modern notation – essentially a case of script mixing.

However, the *longa imperfecta* rest did survive into modern notation and gain a standard CMN form. In traditional music engraving, the symbol U+1D129 MUSICAL SYMBOL MULTIPLE MEASURE REST is used only for *sufficiently long* multimeasure rests. For rests up to approximately ten bars (the precise limit varies between publications), the convention was to combine whole rests (U+1D13B), breve rests (U+1D13A), and *longa* rests. Whole rests represented a single bar's rest (regardless of that bar's actual duration); breve rests represented two bars' rest; and *longa* rests represented four bars' rest (Gould, p. 564).

This convention is becoming rarer in modern scores, which tend instead to use U+1D129 with the appropriate number for all multimeasure rests. However, many sets of orchestral parts using the old notation are still in use. As the modern *longa* rest does not have the same graphic appearance as its mensural counterpart (the *longa imperfecta* rest, U+1D1C2, equalling

two breves), we deem it best to disunify it, just as CMN is disunified from mensural notation despite being its direct descendant.

The *longa perfecta* rest did not survive into CMN in this way, since modern notation always assumes imperfect prolation, i.e. that each note value is twice (not thrice) the value of the next one down. There was never a separate *maxima* rest in mensural notation: it was simply drawn using two or three *longa* rests (depending on whether the *maxima* was perfect or imperfect). Similarly, in modern notation an eight-bar rest is drawn using two modern *longa* rests. Occasionally one can find modernised forms of these rests, which imitate or extend the logic of the mensural *longa* rests by spanning three or four spaces, respectively (Figures 18 and 26), but this is not standard and hence we do not propose them.

References

Elaine Gould (2011) *Behind Bars: The Definitive Guide to Musical Notation*. Faber Music, London.

Figures

- (3) There are three kinds of detached notes:
- (a) notes which are not so long as legato notes; i.e. not shortened but only separated from the next notes.
 - (b) staccato, marked \blacktriangledown , are notes similar to martellato notes, short, heavy, accented, hard.
 - (c) spiccato, marked \bullet , are short, but light, elastic notes. Both \blacktriangledown and \bullet are also used in the piano part and should be played with similar discrimination.
- (4) Notes marked \blacktriangle should be given a certain degree of importance.
- (5) Notes marked \blacktriangledown should be accented, like a down beat. Notes marked \blacktriangle should be unaccented like an upbeat.

Figure 1. Arnold Schoenberg, Piano Concerto Op. 42, Preface (pub. G. Schirmer, New York, 1944). Note that the stress mark (5, first line) is distinguished from the staccato (3b – though he uses the staccatissimo sign for what he calls “staccato”, and the staccato sign for what he calls “spiccato”).

STRESS SYMBOLS INTRODUCED BY SCHOENBERG

Schoenberg introduced symbols to represent a stressed note:  and an unstressed note: . These symbols function to indicate when stresses contradict the metre (see *Cross rhythm*, p. 171).

The symbols should be placed above the staff, except in double-stemmed writing (see bar 2), and outside any articulation marks:

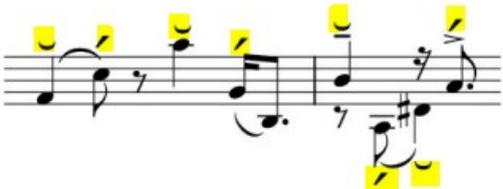


Figure 2. Gould (2011: 115). Explanation of the use and form of Schoenberg’s stress symbols.

The image shows a musical score for Arnold Schoenberg's String Quartet No. 3, Op. 30, measures 50 through 57. The score is arranged in two systems, each with four staves: I. Gg (Violin I), II. Gg (Violin II), Br (Bassoon), and Vel (Violoncello). The first system (measures 50-53) features a forte (ff) dynamic. The second system (measures 54-57) features a piano (p) dynamic. Yellow stress symbols (circles with a vertical line) are placed above notes in measures 51, 52, 53, 54, 55, 56, and 57. Unstress symbols (circles with a vertical line) are placed above notes in measures 51, 52, 53, 54, 55, 56, and 57. The score includes various musical notations such as notes, rests, and dynamic markings.

Figure 3. Arnold Schoenberg, String Quartet No. 3 (Op. 30) (pub. Universal Edition, Vienna, 1927). Stress and unstress symbols in the context of a musical score.

ALLEGRO MOLTO, ENERGICO ♩ = 152

The image shows a musical score for the first four instruments of a string quartet: Violino I^{mo}, Violino II^{do}, Viola, and Violoncello. The music is in 4/4 time and is marked 'ALLEGRO MOLTO, ENERGICO' with a tempo of 152 beats per minute. The score is divided into seven measures. Measures 1, 2, and 3 are highlighted with yellow boxes. Measure 1 contains a stress mark (H) and a staccatissimo mark (staccatissimo). Measure 2 contains a staccatissimo mark (staccatissimo). Measure 3 contains a stress mark (H) and a staccatissimo mark (staccatissimo). Measure 4 contains a staccatissimo mark (staccatissimo). Measure 5 contains a staccatissimo mark (staccatissimo). Measure 6 contains a staccatissimo mark (staccatissimo). Measure 7 contains a staccatissimo mark (staccatissimo). The score includes various articulation marks such as accents, staccatissimo, and stress marks, along with dynamic markings like sf and f.

Figure 4. Arnold Schoenberg, String Quartet No. 4 (Op. 37) (pub. G. Schirmer, New York, 1939). Note how the stress mark (bar 3) is distinguished from the staccatissimo (bar 2), and also how they both combine with another articulation (in this case, a marcato for each).

essentially regular despite some significant conflicts. The conflict between melody and bass in mm. 169-70, which was noted earlier, exists in the “exposition” as well; the recurring $B\flat_1$ plays the role of timekeeper in the first strophe (mm. 84-91). The conflicting meter of the melody is shown as a shadow meter, using Schoenberg’s well-known symbols for “like a strong beat” and “like a weak beat.”⁵⁵ Measures 88-90 hint at $\frac{9}{8}$ meter, as shown; the same implication exists in attenuated form in mm. 173-74.



Figure 5. From William Rothstein (1994) *Ambiguity in the Themes of Chopin’s First, Second, and Fourth Ballades*. *Intégral* 8, pp. 1-50. Use of Schoenberg’s stress symbols to denote conflicting metres.

^	U+E4AE (and U+1D180) <i>articMarcatoStaccatoAbove</i> Marcato-staccato above	˘	U+E4AF <i>articMarcatoStaccatoBelow</i> Marcato-staccato below
˘	U+E4B0 (and U+1D181) <i>articAccentStaccatoAbove</i> Accent-staccato above	˙	U+E4B1 <i>articAccentStaccatoBelow</i> Accent-staccato below
·	U+E4B2 (and U+1D182) <i>articTenutoStaccatoAbove</i> Louré (tenuto-staccato) above	˙	U+E4B3 <i>articTenutoStaccatoBelow</i> Louré (tenuto-staccato) below
≡	U+E4B4 <i>articTenutoAccentAbove</i> Tenuto-accent above	≡	U+E4B5 <i>articTenutoAccentBelow</i> Tenuto-accent below
↗	U+E4B6 <i>articStressAbove</i> Stress above	↘	U+E4B7 <i>articStressBelow</i> Stress below
☺	U+E4B8 <i>articUnstressAbove</i> Unstress above	☹	U+E4B9 <i>articUnstressBelow</i> Unstress below

Figure 6. An excerpt from the table of articulations encoded by SMuFL (w3c.github.io/smufl/latest/tables/articulation.html). For consistency with the other articulations in Unicode, we are not proposing to split the characters based on whether they appear above or below the note.

Regarding the tenuto-accent encoded by SMuFL, we make a side remark here regarding multiple articulations. Unicode has specifically encoded atomic double-articulations for marcato-staccato, accent-staccato, and tenuto-staccato / *louré*. To these SMuFL adds accent-tenuto and marcato-tenuto. However, the combinations can go beyond that. At least accent-staccatissimo, tenuto-staccatissimo and marcato-staccatissimo have been illustrated theoretically (e.g. www.dolmetsch.com/musictheory21.htm), and Béla Bartók's *Mikrokosmos* (no. 146) contains the triple combination of marcato-tenuto-staccato. György Ligeti in his *L'escalier du diable* uses double-accent, triple-accent, double-marcato, and triple-marcato. As seen in Figure 4, Schoenberg's stress marks can also go over normal articulations. We do not consider it necessary to encode all the possible attested combinations, and consider that the more logical solution is to stack combining marks.

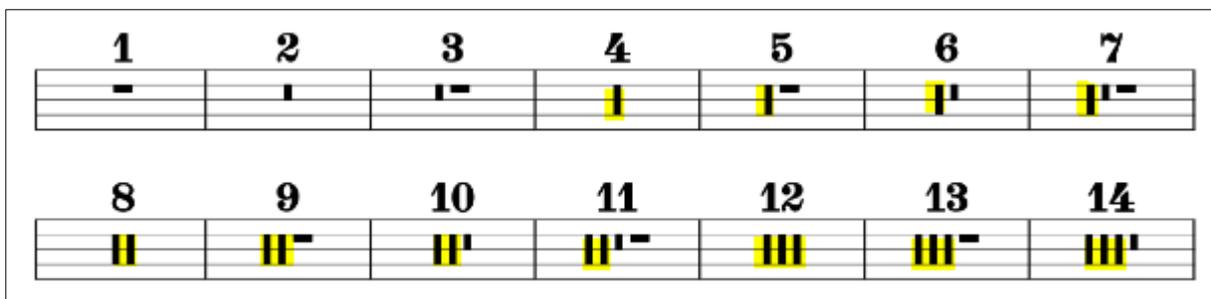


Figure 7. The old convention for multimeasure rests, up to fourteen bars. Made by Rettinghaus for Wikipedia and licensed under CC BY 4.0. Retrieved from en.wikipedia.org/wiki/File:Old_multirests.svg.

Figure 8. First clarinet part from Felix Mendelssohn, Violin Concerto in E minor, Op. 64, end of second movement and beginning of third movement (pub. Breitkopf & Härtel, Leipzig; reprinted by E. F. Kalmus, New York). The old system with *longa*, *breve*, and whole rests is used up to the nine-bar rest, whereas the modern U+1D29 MUSICAL SYMBOL MULTIPLE MEASURE REST is used for the ten-bar rest.

FLAUTO

Allegro molto

11 Viol. I

19 Viol. I

36 Viol. I Ob. (Clar.)

54

69

85

93

p *f* *sf* *sf* *p* *cresc.* *f* *p* *f*

A **B**

Figure 9. Flute part from Wolfgang Amadeus Mozart, Symphony No. 40 (KV 550), beginning of the first movement (pub. Breitkopf & Härtel, Leipzig; reprinted by E. F. Kalmus, New York).

Violine 1

Boris Godunow

Oper v. Mussorgsky

PROLOG und I. AKT

Andante

Fog

1

Viola

3

pizz.

div.

2

arco

mf

unis.

ff

sim.

2

40

f

ff

ff

ff

ff

41

poco meno

ff

f

mf

p

div.

p

42

div.

12'

Figure 11. (Handwritten) first violin part from the beginning and end of the first scene of Modest Mussorgsky, *Boris Godunow* (copied by Pavel Lamm and Boris Asafyev; reprinted by E.



Figure 13. Autograph second horn part for Mozart's Piano Concerto in A major, KV 414/385p. Fascimile taken from the *Neue Mozart-Ausgabe* V/15/3, p. XVI (Bärenreiter Verlag, Kassel, 1976). (Mozart uses a wide black blob, rather than the modern H-bar, for the longer multimeasure rests.)

علامات السكوت (الصمت)

عندما يراه السكوت قليلاً فذلك العزف أو الفناء فإن هناك علامات خاصة تحمل السكوت وفترة الزمنية وكل صغيرة منه صغير عند ذلك السكوت لإيمانه زمنيًا ومدته ما يتبادل مع غيره العلامات الموسيقية وهي سبعة أنواع كما في الشكل - ١٢ -

شكل - ١٢ -

كما تتصل الأخطا المرسومة في شكل - ١٣ - عند السكوت في مازورة أو الكز.

7 2 3 4 8 16

Figure 14. The oud method book of Jamil Bachir (1920–1977), an Iraqi expert oud player. From a scan provided online by Karim Ratib, https://github.com/infojunkie/music-l10n/blob/master/images/bashir_accidentals.png. Use of the old-style multimeasure rests in the Arabic music tradition.

2 measures		double whole-rest in third space
3 measures		two-measure rest plus whole rest
4 measures		two double whole-rests joined as one in second and third spaces
5 measures		four-measure rest plus whole rest
6 measures		four-measure rest plus two-measure rest
7 measures		four-measure rest plus two-measure rest plus whole rest
8 measures		two four-measure rests
9 measures and longer		thick horizontal bar on third line with vertical ends plus large numeral above or below staff

Figure 15. Old-style multimeasure rests illustrated by the Music Encoding Initiative (MEI) (music-encoding.org/guidelines/v5/content/cmnm.html).

It is also acceptable to use the traditional style of rests. The width of the rest symbol is half the width of the semibreve rest. Use a centred beam for more than nine bars' rest:

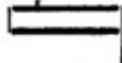
traditional style multiple rests

Figure 16. Gould (2011), p. 564. Another illustration of old-style multimeasure rests.

Glyph	Description	Glyph	Description
	U+E4E0 <i>restMaxima</i> Maxima rest		U+E4E1 <i>restLonga</i> Longa rest
	U+E4E2 (and U+1D13A) <i>restDoubleWhole</i> Double whole (breve) rest		U+E4E3 (and U+1D13B) <i>restWhole</i> Whole (semibreve) rest
	U+E4E4 (and U+1D13C) <i>restHalf</i> Half (minim) rest		U+E4E5 (and U+1D13D) <i>restQuarter</i> Quarter (crotchet) rest
	U+E4E6 (and U+1D13E) <i>rest8th</i> Eighth (quaver) rest		U+E4E7 (and U+1D13F) <i>rest16th</i> 16th (semiquaver) rest
	U+E4E8 (and U+1D140) <i>rest32nd</i> 32nd (demisemiquaver) rest		U+E4E9 (and U+1D141) <i>rest64th</i> 64th (hemidemisemiquaver) rest

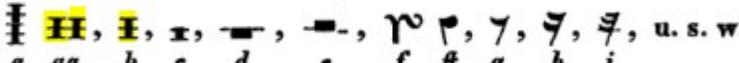
Figure 17. Excerpt from SMuFL’s table of encoded rests in the Private Use Area (w3c.github.io/smufl/latest/tables/rests.html). The *maxima* rest is transparently two *longa* rests side by side, as it is for the eight-bar and longer rests shown in the other figures.

Wie lang oder kurz ein Ton dauern soll, wird in der Notenschrift bekanntlich zunächst durch verschiedene Gestaltungen der Noten angezeigt, und zwar, (um die in den ältesten Zeiten üblich gewesenen und heut zu Tage gar nicht mehr vorkommenden nicht mit zu erwähnen) durch folgende Notengestalten:

- a.) , genannt *Maxima*, Grösste;
- b.) , *Longa*, Lange;
- c.) \equiv oder \circ , $\lvert \equiv \lvert$, $\parallel \circ \parallel$ *Brevis*, Kurze, vier-eckige;
- d.) \circ , *Semibrevis*, halbe Kurze;
- e.) \oslash oder ρ , *Minima*, Kleinste,
- f.) \uparrow oder \downarrow , *Semiminima*, halbe Kleinste;
- g.) \lrcorner oder \ulcorner , *Fusa* oder *Unca*, Gestrichene oder hakenförmig Gekrümmte;
- h.) \frown oder \smile , *Semifusa* oder *Bis unca*, halbe Gestrichene, Zweimalgestrichene, Zweimalgekrümmte, zweihakige;
- i.) $\frown \frown$ oder $\smile \smile$, *Subsemifusa*, oder *Ter unca*, Dreimalgestrichene, Dreimalgekrümmte, Dreihakige, u. s. w.

§ L.

Den verschiedenen Gestaltungen der Tonzeichen oder Noten entsprechen die verschiedenen Formen von Schweigezeichen oder Pausen.



Auch hier bedeutet jede dieser Figuren das Doppelte der nachfolgenden; Fig. a oder aa 32 Viertel, oder 16 Halbe, oder 8 Ganze. — Fig. b 16 Viertel, 8 Halbe, oder 4 Ganze, Fig. c acht Viertel, Fig. d vier, Fig. e zwei, und Fig. f oder ff ein Viertel, u. s. w.

Und auch hier ist es ganz unrichtig, oder wenigstens höchst uneigentlich, was man so oft sagen hört: Fig. a oder aa bedeute acht Takte, Fig. b vier Takte. Fig. c zwei Takte, u. s. w. Wir werden weiter unten bald erkennen lernen, dass auch dieses nur in gewissen Taktarten wahr ist.

Figure 18. (Previous page) Gottfried Weber, *Versuch einer geordneten Theorie der Tonsetzkunst*, Vol. 1, pp. 82 and 87 (pub. B. Schott's Söhne, Mainz, Paris, and Antwerp, 1830–1832). The notes and rests. (We have included the notes to show the correspondence of Weber's figure letters *a* through *i*.) The notes from the breve onward are given with their modern forms; the square mensural forms are substituted for the *maxima* and *longa*, which do not have modern forms. (Alternative square and round glyph variants are given for the breve; the square breve is still sometimes used today as a glyph variant.) Two alternative forms (*a* and *aa*) are shown for the *maxima* rest, but we have only seen the second one (two *longa* rests) in actual scores for an eight-bar rest; we therefore do not propose Weber's form *a*.

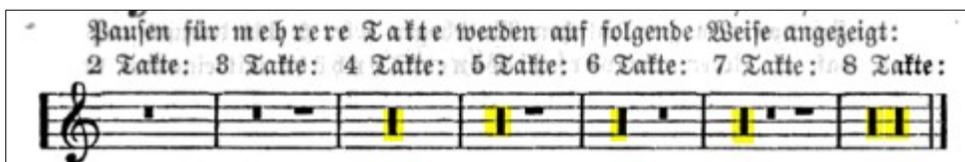


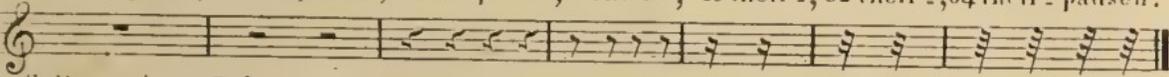
Figure 19. Carl Heinrich Georg Davin, *Elementar-Musiklehre*, p. 33 (3rd ed., pub. Gotth. Wilh. Körner's Verlag, Erfurt and Leipzig, n.d. [1870]). Multimeasure rests.

Longa.	Breve.	Semibreve.	Minima.
Eine lange Note.	Eine kurze Note.	Eine ganze Note.	Die halbe Note.
Gilt 4 Tacte.	Gilt 2 Tacte.	Sie gilt einen Tact, oder 4 Vierteltheile.	Gilt jede 2 Vierteltheile.
		NB. In dem $\frac{3}{4}$ Tripel wird diese ganze Note als ein Vierteltheil angesehen.	Kommen 2 auf den geraden Tact.
Diese Pause gilt 4 Tacte, es mag in einem gleichen oder ungleichen Tacte seyn.	Diese Pause gilt 2 Tacte.	Diese Pause gilt allezeit einen Tact, es sey im gleichen oder ungleichen Zeitsmaße. Im $\frac{3}{4}$ Tripel vertritt diese Pause die Stelle eines Vierteltheils.	Eine halbe Pause. Gilt einen halben Tact.

Figure 20. Leopold Mozart, *Versuch einer gründlichen Violinschule*, p. 34 (1st ed., pub. Johann Jacob Lotter, Augsburg, 1756). The beginning of a table of notes and rests, starting at the *longa*. (Note that the shorter notes use their modern glyphs, while the *longa* keeps its mensural shape.)

Wenn der Spieler eine bestimmte Zeit schweigen (pausiren) soll, so wird dies durch Zeichen, die man Pausen nennt, vorgeschrieben. Jeder dieser Pausen gilt so viel, als die Note, die an ihrer Stelle stehen könnte.

Halbe
 1. Takt - pause, Takt - pausen, Viertelpausen, Achtel - , 16 theil -, 32 theil -, 64 theil - pausen.



Sollen mehrere Takte pausirt werden, so wird dies wie folgt bezeichnet:

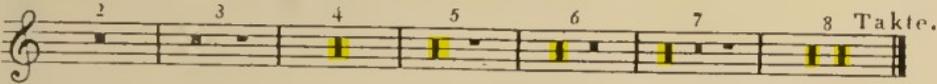


Figure 21. Leopold Mozart, *Versuch einer gründlichen Violinschule*, p. 8 (a newer edition, pub. Johann Cappi, Vienna, n.d. [1806]). The table now begins at the whole rest: longer rests (breve and *longa*) are now shown only in the context of explaining multimeasure rests.

§ X.

Von der Gestalt und Dauer der Pausen.

Pausen nennt man die Zeichen, durch welche angezeigt wird, dass man nicht spielen soll. Es gibt solche Zeichen für jede Notengattung und jede beliebige Anzahl von Takten, z. B.

ganze	halbe	Viertel	Achtel	Sechzehn-	Zweiunddreis-	Vierundsechzig-
Taktpause	Taktpause			tel -	sigtel -	stel Pause.



Soll mehrere Takte hindurch (pausirt) geschwiegen werden, so wird dies auf folgende Art bezeichnet, als:



Sollen aber noch mehr Takte pausirt werden, so macht man einen langen Querstrich und schreibt die Zahl der zu pausirenden Takte darüber, z. B.

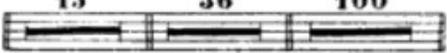


Figure 22. Hubert Ries, *Violin-Schule*, p. 9 (pub. Hofmeister, 1872). Rests, including multimeasure rests. (The two forms of the quarter rest are stylistic alternates, and do not have any difference in meaning.)

SIGNES REPRÉSENTATIFS DES SILENCES.

<p>Bâton de quatre pauses, ou quatre mesures de silence</p>	4		<p>Quart de pause.</p>	
<p>Bâton de deux pauses, ou deux mesures de silence</p>	2		<p>Huitième de pause</p>	
<p>Pause, unité des silences se rapportant à celle des valeurs de notes (A). Voir les notes.</p>	1		<p>Trente-deuxième de pause</p>	
<p>Demi-pause</p>			<p>Soixante-quatrième de pause</p>	<p>(B)</p> 

(NOTE A.) Ici l'on doit supposer la mesure remplie par une *ronde*; car si le signe de la *pause*, ainsi que ceux qu'on nomme bâtons de deux et quatre pauses conviennent à toutes les espèces de mesures, il n'en est pas ainsi des signes moindres, comme on le verra au deuxième Tableau.

(B.) Pour les figures représentatives des sons, comme pour celles des silences, on doit dire, sachant de quoi il s'agit : *demi-quart, huitième, seizième, trente-deuxième, soixante-quatrième* (sous-entendu), de *ronde* ou de *pause*.

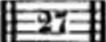
Si l'on veut exprimer un certain nombre de pauses autrement qu'en chiffres, c'est-à-dire par des bâtons de quatre et de deux pauses, on les ordonne ainsi :  et l'on a soin d'écrire au-dessus le chiffre correspondant au nombre de pauses à compter ; mais c'est un double emploi qu'on évite aujourd'hui en écrivant comme ceci :  ou 

Figure 23. Louis François Dauprat, *Le professeur de musique*, p. 4 (pub. A. Quinzard, Paris, 1857). Rests, including multimeasure rests.

Von den Pausen.

Wenn in einem Takte der Werth desselben durch Noten nicht ganz ausgefüllt ist, so ergänzt man ihn durch die Schweigezeichen oder Pausen.
Die Pausen werden wie die Noten eingetheilt in

ganze, $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{8}$ $\frac{1}{16}$ $\frac{1}{32}$ Pausen.

Die ganze Pause hat den Werth des vorgeschriebenen Taktes, z. B.

Mehrere Takte des Stillschweigens durch Pausen ausgedrückt, geschieht wie z. B.

gilt 2 4 8 5 3 Takte.

Figure 24. Franz Xaver Klaß, *Sammlung 2- u. 3-stimmiger Schul-Lieder*, p. 5 (8th ed., pub. J. G. Weiß, Munich, 1851). Rests, including multimeasure rests.

Ex. 1. Ex. 2. Ex. 3. Ex. 4. Ex. 5. Ex. 6.

Pause Demi-Pause Soupir Demi-Soupir Quart-de-Soupir Demi-Quart-de-Soupir

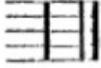
Ex. 7. Bâton de deux Pausés valant deux Mesures.

Ex. 8. Bâton de quatre Pausés valant quatre Mesures.

Figure 25. Jean Joseph Rodolphe, *Solfège ou nouvelle méthode de musique*, p. 7 (pub. Janet et Cotelle, Paris, 1820). Notes and rests.

für vier Takte 

für sechs Takte seltener im Gebrauche 

ebenso selten für acht Takte: 

Durch die Zeichen für zwei und vier Takte lassen sich verschiedene Summen von Taktpausen zusammensetzen, und um Missverständniss zu verhüten, schreibt man gewöhnlich die Summe der Pausen in Ziffern darüber:

3.	5.	6.	8.	9.	10.	11.	12.	15.	etc.

Eine grössere Summe von Pausen bezeichnet man häufig mit einem schrägen Querstriche, über welchen man die Zahl der nöthigen Pausen setzt:

8.	20.	48.	etc.

Figure 26. M. H. Winkler, *Allgemeine Musiklehre*, p. 50 (pub. C. H. Beck, Nördlingen, 1870). Multimeasure rests. In addition to the breve (not shown) and *longa* for two and four bars' rest, Winkler also gives a modernised *longa perfecta* rest for six bars' rest, and a symbol resembling Weber's (Figure 18) for the eight-bar rest, though he says that they are rarely used, and that multimeasure rests are drawn with the signs for two and four bars of rest (the whole rest seems to be understood). We are not proposing those extra nonstandard rarities.

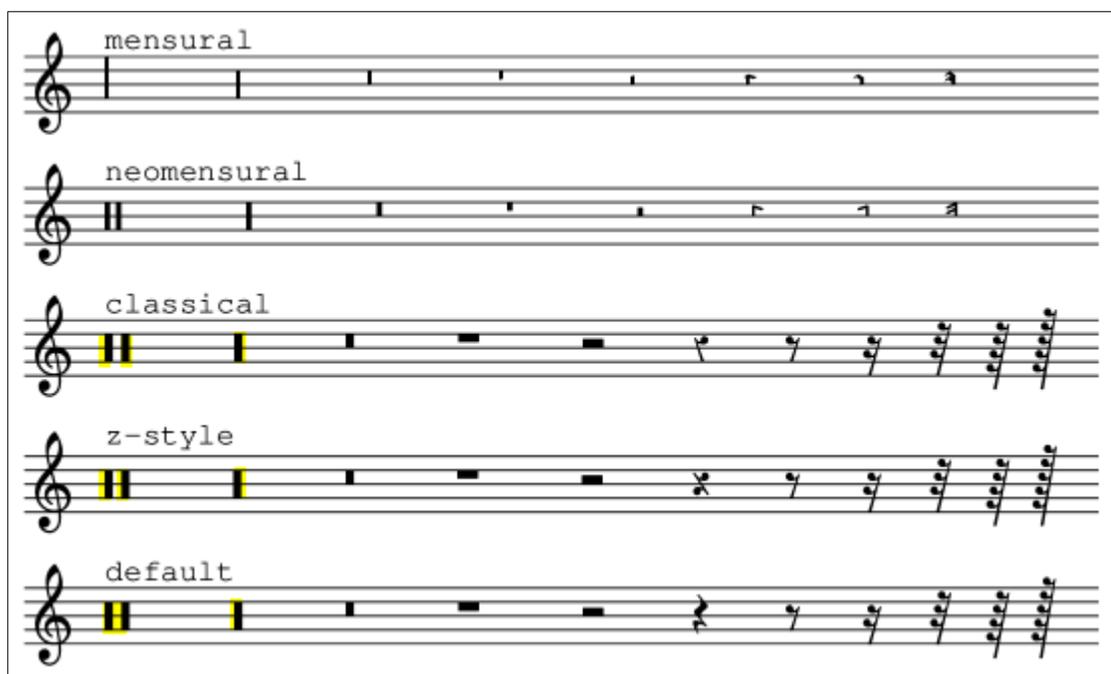


Figure 27. Available rest styles, from *maxima* to 128th, in the *LilyPond* notation software package (lilypond.org/doc/v2.23/Documentation/notation/writing-rests). (The mensural “*maxima*” rest in the first line is a mistake: it is really a *longa perfecta* rest, contrasting with the *longa imperfecta* rest that comes immediately afterwards.)

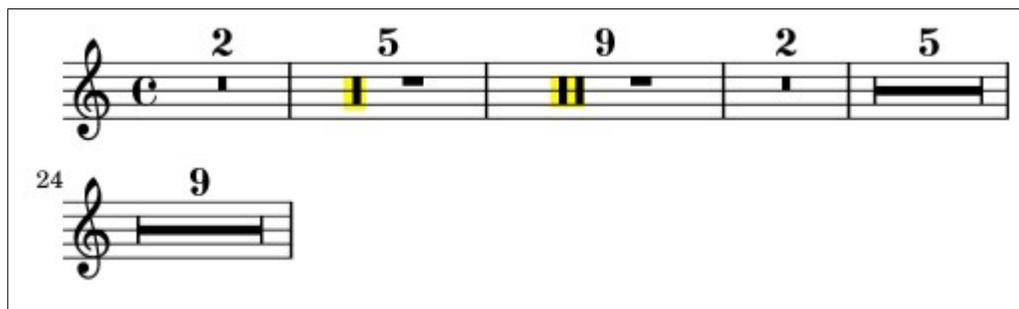


Figure 28. Multimeasure rests in *LilyPond* (lilypond.org/doc/v2.25/Documentation/notation/compressing-empty-measures).

(*LilyPond* appears to use the *maxima* glyph – i.e. two *longa* rests – to create rests of length eight measures and above; but this creates an unevenness in spacing that is not followed in traditional engraving, cf. Figures 8 and 10, or in handwriting, cf. Figures 11–13.)

Note	Rest	American name	British name	Relative value
		large, duplex longa, or <i>maxima</i> ^{[1][2]} (occasionally <i>octuple note</i> , ^[3] <i>octuple whole note</i> , ^[4] or <i>octuple entire musical note</i>) ^[5]		8
		long ^{[2][6][7]} or <i>longa</i> ^[8] (occasionally <i>quadruple note</i> ^[9] or <i>quadruple whole note</i>) ^[4]		4
		double whole note, ^[10] double note ^{[11][12][13]}	breve	2
		whole note	semibreve	1
		half note	minim	$\frac{1}{2}$
		quarter note	crotchet	$\frac{1}{4}$

Figure 29. The top of Wikipedia’s table of note values, including *longa* and *maxima*, which are illustrated using their mensural forms.

ISO/IEC JTC 1/SC 2/WG 2

**PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646¹.**
Please fill all the sections A, B and C below.
Please read Principles and Procedures Document (P & P) from std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form.
Please ensure you are using the latest Form from std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.
See also std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps.

A. Administrative

1. **Title:** *Unicode request for three musical symbols*

2. Requester's name: *Gavin Jared Bala, Kirk Miller*

3. Requester type (Member body/Liaison/Individual contribution): *individual*

4. Submission date: *2024 January 05*

5. Requester's reference (if applicable):

6. Choose one of the following:
This is a complete proposal: *yes*
(or) More information will be provided later:

B. Technical – General

1. Choose one of the following:
a. This proposal is for a new script (set of characters): *no*
Proposed name of script:
b. The proposal is for addition of character(s) to an existing block: *yes*
Name of the existing block: *Musical Symbols*

2. Number of characters in proposal: *3*

3. Proposed category (select one from below - see section 2.2 of P&P document):
A-Contemporary B.1-Specialized (small collection) B.2-Specialized (large collection)
C-Major extinct D-Attested extinct E-Minor extinct
F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usage symbols

4. Is a repertoire including character names provided? *yes*
a. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document? *yes*
b. Are the character shapes attached in a legible form suitable for review? *yes*

5. Fonts related:
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard? *Kirk Miller*
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.): *SIL (Gentium release)*

6. References:
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? *yes*
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? *yes*

7. Special encoding issues:
Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? *no*

8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at www.unicode.org for such information on other scripts. Also see Unicode Character Database

¹ Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

(www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? If YES explain		<i>no</i>
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)? If YES, with whom? If YES, available relevant documents:	<i>Author is a member of the user community.</i>	<i>yes</i>
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Reference:		
4. The context of use for the proposed characters (type of use; common or rare) Reference:		<i>music</i>
5. Are the proposed characters in current use by the user community? If YES, where? Reference:	<i>See figures</i>	<i>yes</i>
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? If YES, is a rationale provided? If YES, reference:		<i>no</i>
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?		<i>yes</i>
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? If YES, is a rationale for its inclusion provided? If YES, reference:		<i>no</i>
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? If YES, is a rationale for its inclusion provided? If YES, reference:		<i>no</i>
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character? If YES, is a rationale for its inclusion provided? If YES, reference:		<i>no</i>
11. Does the proposal include use of combining characters and/or use of composite sequences? If YES, is a rationale for such use provided? If YES, reference: Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? If YES, reference:		<i>no</i>
12. Does the proposal contain characters with any special properties such as control function or similar semantics? If YES, describe in detail (include attachment if necessary)		<i>no</i>
13. Does the proposal contain any Ideographic compatibility characters? If YES, are the equivalent corresponding unified ideographic characters identified? If YES, reference:		<i>no</i>