

**ISO/IEC JTC 1/SC 2/WG 2  
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS  
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646<sup>1</sup>**

Please fill all the sections A, B and C below.

(Please read Principles and Procedures Document for guidelines and details before filling this form.)

See <http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html> for latest Form.

See <http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html> for latest Principles and Procedures document.

See <http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest roadmaps.

**A. Administrative**

1. **Title:** **Proposal to encode Greek Acrophonic characters in the UCS**  
 2. Requester's name: **Thesaurus Linguae Graecae Project (University of California, Irvine) and UTC**  
 3. Requester type (Member body/Liaison/Individual contribution): **Expert Contribution**  
 4. Submission date: **2003-06-11**  
 5. Requester's reference (if applicable):  
 6. This is a complete proposal:

**B. Technical - General**

1. (Choose one of the following:)
- a. This proposal is for a new script (set of characters): **Yes**  
 Proposed name of script: **Ancient Greek Numerical Characters (10140-10174)**
- b. The proposal is for addition of character(s) to an existing block:  
 Name of the existing block:
2. Number of characters in proposal: **53**
3. Proposed category (see section II, Character Categories): **Category C**
4. Proposed Level of Implementation (1, 2 or 3) (see clause 14, ISO/IEC 10646-1: 2000): **Level 1**  
 Is a rationale provided for the choice? **Yes**  
 If Yes, reference: **No combining characters**
5. 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 ISO/IEC 10646-1: 2000? **Yes**
- b. Are the character shapes attached in a legible form suitable for review? **Yes**
6. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard? **David Perry and TLG Project (True Type)**  
 If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: **TLG Project, mcpantel@uci.edu**
- 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**
8. 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**
9. Additional Information: **All characters have the NI property**  
 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 <http://www.unicode.org> for such information on other scripts. Also see <http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

<sup>1</sup> Form number: N2352-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09)

**C. Technical - Justification**

1. Has this proposal for addition of character(s) been submitted before? If YES explain _____	<b>No</b>
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? <b>The TLG has been in contact with experts in the field of Classics. Earlier versions of this proposal have been posted online and received comments by members of the profession. Proposal was reviewed by Dr. John Mansfield, Cornell University, Professor Jeffrey Rusten, Cornell University, Professor Roger Bagnall, Columbia University and Dr. Deborah Anderson, UC Berkeley.</b>	<b>Yes</b>
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Reference: _____	<b>Scholarly community</b>
4. The context of use for the proposed characters (type of use; common or rare) : Reference: _____	<b>Use varies</b> <b>See proposal</b>
5. Are the proposed characters in current use by the user community? If YES, where? <b>Characters are present primarily in ancient inscriptions and their modern editions. Used extensively by scholars of Greek.</b> Reference: _____	<b>Yes</b> <b>See proposal</b>
6. After giving due considerations to the principles in <i>Principles and Procedures document</i> (a WG 2 standing document) must the proposed characters be entirely in the BMP? If YES, is a rationale provided? If YES, reference: _____	<b>No</b>
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	<b>Yes</b>
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: _____	<b>No</b>
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: _____	<b>No</b>
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? If YES, is a rationale for its inclusion provided? <b>A few characters are similar but not identical</b>	<b>Yes</b>
11. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)? 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: _____	<b>No</b>
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) _____	<b>No</b>
13. Does the proposal contain any Ideographic compatibility character(s)? If YES, is the equivalent corresponding unified ideographic character(s) identified? _____ If YES, reference: _____	<b>No</b>

## Introduction

This proposal contains 53 Greek Acrophonic<sup>2</sup> (numerical, non-alphabetic) characters. Acrophonic numerals are found primarily in ancient Greek inscriptions from Athens and other Greek city-states.<sup>3</sup> The Attic system (Attica is the greater geographic area which includes the city of Athens) is the most common and well-documented. A transcribed inscription from Athens (ca. 451/0 BC) showing a number of acrophonic numerals is appended at the end of this document.<sup>4</sup>

The proposed acrophonic characters appear in a large number of ancient inscriptions. They are the standard symbols used for the representation of weight or cost and have consistently been used in modern editions of Greek inscriptions as well as various publications related to the study and interpretation of ancient documents. The proposed characters are already present in existing non-Unicode Greek fonts and used consistently by the scholarly community.

The table *Complete Outline of Ancient Greek Acrophonic Numerals* below shows all 76 characters required to represent acrophonic numerals in Unicode. Twenty-one of these characters already exist in the Unicode standard. The proposal includes the characters needed for the encoding of the *Attic* acrophonic system—namely characters used in Athens and the surrounding area (Attica)—and non-Attic characters which cannot be considered glyph variants of Attic.

The property for all these characters is “NI”.

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<sup>2</sup> The name ‘acrophonic’ from the Greek word “akron” which means ‘extreme’ or ‘farthest point.’ The term implies that the initial letter of the word by which the number is called, represents the number itself. E.g. Δ (=10) is used for ΔΕΚΑ, the Greek word for ‘ten.’

<sup>3</sup> Heath & Toomer (1996) 1052


























<sup>4</sup> Hiller von Gaertringen, F., *Inscriptiones Graecae I Editio Minor* (Berlin, 1924) 83

## Complete Outline of Ancient Greek Acrophonic Numerals

Name		Unicode	Additional Character Names, Glyph Variants, Notes, Examples
<b>Attic Acrophonic Symbol One Twelfth</b>	/	002F	<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol One Twelfth Obol</li> </ul> Example: <i>IG (Inscriptiones Graecae) I.43</i>
<b>Attic Acrophonic Symbol One Chalkous</b>	X	03A7	<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol One Eighth</li> <li>Attic Acrophonic Symbol One Eighth Obol</li> <li>Attic Acrophonic Symbol One Thousand</li> <li>Attic Acrophonic Symbol One Thousand Drachmas</li> <li>Cyrenaic Acrophonic Symbol Twenty Drachmas</li> </ul> Example: <i>IG I.85</i>
<b>Attic Acrophonic Symbol One Quarter</b>	⸁		<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol One Quarter Obol</li> </ul> Example: <i>IG I.151</i>
<b>Attic Acrophonic Symbol One Half</b>	⸂		<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol One Half Obol</li> <li>Troezenian Acrophonic Symbol One Drachma</li> </ul> Example: <i>IG I.151</i>
<b>Attic Acrophonic Symbol One</b>	⸃	0399	<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol One Obol</li> <li>Troezenian Acrophonic Symbol One Quarter</li> <li>Orchomenian Acrophonic Symbol One Drachma</li> <li>Also used in Carystian system as one Drachma</li> </ul> Example: <i>IG I.82</i>
<b>Attic Acrophonic Symbol One Drachma</b>	⸄		Example: <i>IG I.82</i>
<b>Attic Acrophonic Symbol Five</b>	⸅		<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol Five Drachmas</li> <li>Heraeum Acrophonic Symbol One Plethron</li> <li>Epidaurean Acrophonic Symbol Five Chalkoi</li> <li>Argive, Acrophonic Symbol Fifty</li> <li>Cyrenaic Acrophonic Symbol Five Mnas</li> <li>Also used in Heraeum, Epidaurian and Troezenian systems as fifty.</li> </ul> Example: <i>IG I.82</i>
<b>Attic Acrophonic Symbol Ten</b>	⸆	0394	<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol Ten Drachmas</li> <li>Thespian Acrophonic Symbol One Drachma (⸆)</li> <li>Orchomenian Acrophonic Symbol Ten Drachmas (⸆)</li> <li>Cyrenaic Acrophonic Symbol One Fiftieth Drachma</li> </ul> Example: <i>IG I.82</i>
<b>Attic Acrophonic Symbol Fifty</b>	⸇		<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol Fifty Drachmas</li> </ul> <i>Glyph variants:</i> Naxos: ⸇ Example: <i>IG I.82</i>
<b>Attic Acrophonic Symbol One Hundred</b>	⸈	0397	<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol One Hundred Drachmas</li> <li>Thespian, Orchomenian Acrophonic Symbol One Half</li> <li>Also used in Orchomenian system as one half</li> </ul> <i>Glyph variants:</i> Argos, Nemea, Epidaurus, Troezen: ⸈ (archaic glyph variant) Example: <i>IG I.82</i>
<b>Attic Acrophonic Symbol Five Hundred</b>	⸉		<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol Five Hundred Drachmas</li> </ul> <i>Glyph variants:</i> Epidaurus: ⸉ Cos: ⸉ Example: <i>IG I.83</i>
<b>Attic Acrophonic Symbol Five Thousand</b>	⸊		<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol Five Thousand Drachmas</li> </ul> Example: <i>IG I.83</i>
<b>Attic Acrophonic Symbol Ten Thousand</b>	⸋	039C	<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol Ten Thousand Drachmas</li> <li>Attic Acrophonic Symbol One Mna</li> </ul> Example: <i>IG I.170</i>
<b>Attic Acrophonic Symbol Fifty Thousand</b>	⸌		<ul style="list-style-type: none"> <li>Attic Acrophonic Symbol Fifty Thousand Drachmas</li> <li>Attic Acrophonic Symbol Five Mnas</li> </ul> Example: <i>IG I.170</i>

<b>Attic Acrophonic Symbol One Talent</b>	Τ	03A4	<ul style="list-style-type: none"> <li>• Epidaurian Acrophonic Symbol One Quarter</li> <li>• Thespian Acrophonic Symbol Three</li> <li>• Also used in Hermionian, Tegean and Delphic systems for one quarter.</li> <li>• Also used in Naxan and Andanian systems for three</li> </ul> Example: <i>IG I.132</i>
<b>Attic Acrophonic Symbol Five Talents</b>	Ϝ		Example: <i>IG I.130</i>
<b>Attic Acrophonic Symbol Ten Talents</b>	Ϙ		Example: <i>IG I.130</i>
<b>Attic Acrophonic Symbol Fifty Talents</b>	ϙ		Example: <i>IG I.132</i>
<b>Attic Acrophonic Symbol One Hundred Talents</b>	Ϡ		Example: <i>IG I.130</i>
<b>Attic Acrophonic Symbol Five Hundred Talents</b>	ϡ		Example: <i>IG I.152</i>
<b>Attic Acrophonic Symbol One Thousand Talents</b>	ϣ		Example: <i>IG I.152</i>
<b>Attic Acrophonic Symbol Five Thousand Talents</b>	Ϥ		Example: <i>IG I<sup>2</sup>.342</i>
<b>Attic Acrophonic Symbol One Stater</b>	Σ	03A3	<ul style="list-style-type: none"> <li>• Epidaurean Acrophonic Symbol One Chalkous</li> </ul> <i>Glyph Variants:</i> Thespiae: Ϛ Example: <i>IG I.135</i>
<b>Attic Acrophonic Symbol Five Staters</b>	Ϟ		Example: <i>IG I.163</i>
<b>Attic Acrophonic Symbol Ten Staters</b>	ϟ		Example: <i>IG I.163</i>
<b>Attic Acrophonic Symbol Fifty Staters</b>	Ϡ		Example: <i>IG I.163</i>
<b>Attic Acrophonic Symbol One Hundred Staters</b>	ϡ		Example: <i>IG I<sup>2</sup>.347</i>
<b>Attic Acrophonic Symbol Five Hundred Staters</b>	Ϣ		Example: <i>IG I<sup>2</sup>.347</i>
<b>Attic Acrophonic Symbol One Thousand Staters</b>	ϣ		Example: <i>IG I<sup>2</sup>.347</i>
<b>Attic Acrophonic Symbol Ten Thousand Staters</b>	Ϥ		Example: <i>IG I<sup>2</sup>.347</i>
<b>Attic Acrophonic Symbol Fifty Thousand Staters</b>	ϥ		Example: <i>IG I<sup>2</sup>.347</i>
<b>Attic Acrophonic Symbol Ten Mnas</b>	Μ		<ul style="list-style-type: none"> <li>• Thespian Acrophonic Symbol Ten Thousand</li> </ul> <i>Glyph Variants:</i> Tegea: Ϟ Messene: ϟ Andania, Stratus: Ϡ Example: <i>IG I.163</i>
<b>Heraeum Acrophonic Symbol One Plethron</b>	ϙ		<ul style="list-style-type: none"> <li>• Epidaurean Acrophonic Symbol Five</li> </ul> Example: <i>IG IV.336</i>
<b>Andanian Acrophonic Symbol One Kollybos</b>	Κ	039A	Example: <i>IG V.1.#1532</i>
<b>Troezenian Acrophonic One Eighth</b>	○	25EF	<ul style="list-style-type: none"> <li>• Thespian Acrophonic Symbol One</li> <li>• Argos Acrophonic Symbol Ten</li> <li>• Also used in Orchomenian, Carystian systems for one</li> </ul> Example: <i>IG 4.162</i>
<b>Andanian Acrophonic Symbol One Quarter</b>	>	003E	<ul style="list-style-type: none"> <li>• Cyrenaic Acrophonic Symbol One Fifth Drachma</li> <li>• Cyrenaic Acrophonic Symbol Ten Mnas</li> </ul> Example: properly a glyph variant of Attic Acrophonic Symbol One Quarter. See. <i>IG V.2.11</i>

<b>Andanian Acrophonic Symbol One Half</b>	◁	003C	<ul style="list-style-type: none"> <li>• Also found in Epidaurian and Thespian systems for one half</li> <li>• Tegean Acrophonic Symbol One Drachma</li> </ul> Example: properly a glyph variant of Attic Acrophonic Symbol One Half. See <i>IG V.1.#1532</i>
<b>Naxian Acrophonic Symbol One Half</b>	┌	0393	Example: <i>IG V.2.11</i>
<b>Tegean Acrophonic Symbol One Half</b>	Ε	0395	Example: <i>IG V.2.11</i>
<b>Troezenian Acrophonic Symbol One Half</b>	┐	1D215	<ul style="list-style-type: none"> <li>• Carystian, Acrophonic Symbol One Hundred</li> </ul> Example: <i>IG 4.162</i>
<b>Nemean Acrophonic Symbol One Half</b>	⊥	039E	<i>Note:</i> Archaic glyph variant of 039E. Example: <i>IG IV.67</i>
<b>Argive Acrophonic Symbol One</b>	—	10110	<ul style="list-style-type: none"> <li>• Also found in Nemean and Troezenian systems for one</li> <li>• Hermionian Acrophonic Symbol One Half</li> <li>• Heraeum Acrophonic Symbol Ten</li> <li>• Cyrenaic Acrophonic Symbol One Tenth Drachma</li> <li>• Cyrenaic Acrophonic Symbol One Mna</li> <li>• Also found in Troezenian, Carystian acrophonic systems for ten</li> </ul> Example: <i>IG 4.162</i>
<b>Argive Acrophonic Symbol One</b>	.	00B7	<ul style="list-style-type: none"> <li>• Also found in Heraeum and Nemean systems for one</li> </ul> Example: <i>IG IV.316</i>
<b>Thespian Acrophonic Symbol One</b>	▷		Example: <i>IG VII.301</i>
<b>Hermionian Acrophonic Symbol One</b>	┐		Example: <i>IG IV.137</i>
<b>Epidaurian Acrophonic Symbol Two</b>	• •		<i>Note:</i> Not same as 003A. Top dot level with top of uppercase letters. Design to match 00B7. Example: <i>IG IV.316</i>
<b>Epidaurian Acrophonic Symbol Three</b>	∴	See note	<i>Note:</i> Proposed separately as a papyrological character. Design to match 00B7. Example: <i>IG IV.316</i>
<b>Thespian Acrophonic Symbol Two</b>	∑		Example: <i>IG IV.299</i>
<b>Cyrenaic Acrophonic Symbol One Drachma</b>	Z	0396	<ul style="list-style-type: none"> <li>• Cyrenaic Acrophonic Symbol Fifty Mnas</li> </ul> Example: Tod (1936-7) 257
<b>Cyrenaic Acrophonic Symbol Two Drachmas</b>	⊔		<ul style="list-style-type: none"> <li>• Cyrenaic Acrophonic Symbol One Hundred Mnas</li> </ul> Example: Tod (1936-7) 257
<b>Epidaurian Acrophonic Symbol Two Drachmas</b>	— —		<i>Note:</i> Top line level with top of uppercase letters, therefore not the same as 10111. Further, cannot be regarded as a glyph variant as they will occur in the same texts as each other. Example: <i>IG IV.316</i>
<b>Epidaurian Acrophonic Symbol Three Drachmas</b>	≡	10112	<i>Note:</i> Top line level with top of uppercase letters. Example: <i>IG IV.162</i>
<b>Troezenian Acrophonic Symbol Five</b>	┐		<ul style="list-style-type: none"> <li>• Also found at Tegea</li> </ul> Example: <i>IG 4.163</i>
<b>Argive Acrophonic Symbol Ten</b>	⊙	2609	<ul style="list-style-type: none"> <li>• Also found at Nemea and Heraeum</li> </ul> Example: <i>IG IV.79</i>
<b>Troezenian Acrophonic Symbol Ten</b>	≍		<ul style="list-style-type: none"> <li>• Cyrenaic Acrophonic Symbol Four Drachmas</li> <li>• Cyrenaic Acrophonic Symbol Two Hundred Mnas</li> </ul> Example: <i>IG 4.162</i>
<b>Troezenian Acrophonic Symbol Ten</b>	⊗		Example: <i>IG IV.176</i> <i>Notes:</i> Not glyph variant of Troezenian Acrophonic Symbol Ten Units/ Cyrenaic Acrophonic Symbol Four Drachmas above
<b>Hermionian Acrophonic Symbol Ten</b>	↗		Example: <i>IG IV.137</i>
<b>Messenian Acrophonic Symbol Ten</b>	↗		Example: <i>IG V.1.2.288</i>
<b>Thespian Acrophonic Symbol Ten</b>	⊕		Example: <i>IG VII.301</i>

<b>Thespian Acrophonic Symbol Thirty</b>		<ul style="list-style-type: none"> <li>• Also found at Orchomenus</li> </ul> <i>Glyph Variants:</i> Thespieae:  ,  ,  ,  ,  Orchomenus:  Example: <i>IG VII.299</i>
<b>Troezenian Acrophonic Symbol Fifty</b>		<ul style="list-style-type: none"> <li>• Epidaurean Acrophonic Symbol Five Hundred Units</li> </ul> Example: <i>IG IV.337</i>
<b>Troezenian Acrophonic Symbol Fifty</b>		Example: <i>IG 4.163</i> <i>Notes:</i> Not glyph variant of Troezenian Acrophonic Symbol Fifty / Epidaurean Acrophonic Symbol Five Hundred above.
<b>Hermionian Acrophonic Symbol Fifty</b>		Example: <i>IG IV.136</i>
<b>Thespian Acrophonic Symbol Fifty</b>		<ul style="list-style-type: none"> <li>• Also found at Orchomenus</li> </ul> Example: <i>IG VII.300</i>
<b>Thespian Acrophonic Symbol One Hundred</b>		<ul style="list-style-type: none"> <li>• Also found at Orchomenus</li> </ul> Example: <i>IG VII.304</i>
<b>Thespian Acrophonic Symbol Three Hundred</b>		Example: <i>IG VII.300</i>
<b>Epidaurean Acrophonic Symbol Five Hundred</b>		Example: <i>IG IV.335</i>
<b>Troezenian Acrophonic Symbol Five Hundred</b>		Example: <i>IG 4.165</i>
<b>Thespian Acrophonic Symbol Five Hundred</b>		<ul style="list-style-type: none"> <li>• Also found at Orchomenus</li> </ul> <i>Glyph Variants:</i> • Thespieae:  ,  ,  Example: <i>IG VII.299</i>
<b>Carystian Acrophonic Symbol Five Hundred</b>		Example: Tod (1911-12) 113
<b>Naxian Acrophonic Symbol Five Hundred</b>		<i>IG XII.sup.104</i>
<b>Thespian Acrophonic Symbol One Thousand</b>		<ul style="list-style-type: none"> <li>• Also found at Orchomenus</li> </ul> Example: <i>IG VII.299</i>
<b>Thespian Acrophonic Symbol Five Thousand</b>		<ul style="list-style-type: none"> <li>• Also found at Orchomenus</li> </ul> Example: <i>IG VII.575</i>
<b>Delphic Acrophonic Symbol Five Mnas</b>		Example: <i>IG V.1.2.288</i>
<b>Stratian Acrophonic Symbol Fifty Mnas</b>		Example: <i>IG IX.1.2.41</i>

## Bibliography

- Avi-Yonah, M., "Abbreviations in Greek Inscriptions (The Near East, 200 B.C.-A.D. 1100)." in Oikonomides, A.N. (ed.), *Abbreviations in Greek: Inscriptions, Papyri, Manuscripts and Early Printed Books*. (Chicago 1974)
- Dittenberger, W., *Inscriptiones Graecae* 7 (Berlin, 1892)
- Fraenkel, M., *Inscriptiones Graecae* 4 (Berlin 1873)
- Gardthausen, V., *Griechische Palaeographie*. 2 vols. (Lepizig, 1913)
- Heath, T. & Toomer, G.J., "Numbers, Greek" in *OCD*<sup>3</sup> (Oxford, 1996) 1052-3
- Heath, T., *A History of Greek Mathematics* 2 vols. (Oxford, 1921)
- Hiller von Graetringen, F., *Inscriptiones Graecae I. Editio Minor* (Berlin, 1924)
- Jeffery, L.H., *The Local Scripts of Archaic Greece* (Oxford, 1961)
- Kirchner, J., *Inscriptiones Graecae* II/III.1 (Berlin, 1913)
- Klaffenbach, G., *Inscriptiones Graecae* 9.1.2 (Berlin, 1957)
- Larfeld, W., *Handbuch der griechischen Epigraphik* 2.2. *Die attischen Inschriften* (Leipzig, 1902)
- Lewis, D., *Inscriptiones Graecae* 1 2<sup>nd</sup> Edn. (Berlin, 1981)
- Oikonomides, A. N. (ed), *Abbreviations in Greek Inscriptions: Papyri, Manuscripts and Early Printed Books* (Chicago, 1974)
- Packard Humanities Institute (PHI) CD-ROM 7.0 (Packard Humanities Institute, 1996)
- Pririe, J.W., Jeffery, L.H. & Johnston, A.W., "Alphabet, Greek" in *OCD*<sup>3</sup> (1996) 66
- Pryce, F.N., Lang, M.L. & Vickers, M. "Measures" in *OCD*<sup>3</sup> (1996) 942-3
- Threatte, L., *The Grammar of Attic Inscriptions* 2 vols. (Berlin & New York, 1980 & 1996)
- Tod, M.N., "Further Notes on the Greek Acrophonic Numerals" in *The Annual of the British School at Athens* XLV (1950) 141-157
- Tod, M.N., "The Greek Acrophonic Numerals" in *The Annual of the British School at Athens* XXXVII (1936-7) 236-57
- Tod, M.N., "The Greek Numeral Notation" in *The Annual of the British School at Athens* XVIII (1911-12) 98-132
- Woodhead, A.G., *The Study of Greek Inscriptions* 2<sup>nd</sup> edn. (Cambridge, 1981)



**TABLE 10140-10174: GREEK NUMERICAL CHARACTERS**

	1014	1015	1016	1017
0	Ϟ	ϙ	Ϛ	ϛ
1	Ϝ	ϝ	Ϙ	ϙ
2	ϟ	Ϡ	ϡ	Ϣ
3	ϣ	Ϥ	ϥ	Ϧ
4	ϩ	Ϩ	ϩ	Ϫ
5	ϫ	Ϭ	ϭ	
6	ϯ	ϰ	ϱ	
7	ϳ	ϴ	ϵ	
8	Ϸ	ϸ	Ϻ	
9	ϼ	Ͻ	Ͽ	
A	ϻ	ϼ	Ͽ	
B	Ͽ	⋮	Ͽ	
C	Ͽ	Ϸ	Ͽ	
D	Ͽ	Ͽ	Ͽ	
E	Ͽ	Ͽ	Ͽ	
F	Ͽ	Ͽ	Ͽ	

**TABLE xx01-3F: GREEK NUMERICAL CHARACTERS**

hex	Name
10140	ATTIC ACROPHONIC SYMBOL ONE QUARTER
10141	ATTIC ACROPHONIC SYMBOL ONE HALF
10142	ATTIC ACROPHONIC SYMBOL ONE DRACHMA
10143	ATTIC ACROPHONIC SYMBOL FIVE
10144	ATTIC ACROPHONIC SYMBOL FIFTY
10145	ATTIC ACROPHONIC SYMBOL FIVE HUNDRED
10146	ATTIC ACROPHONIC SYMBOL FIVE THOUSAND
10147	ATTIC ACROPHONIC SYMBOL FIFTY THOUSAND
10148	ATTIC ACROPHONIC SYMBOL FIVE TALENTS
10149	ATTIC ACROPHONIC SYMBOL TEN TALENTS
1014A	ATTIC ACROPHONIC SYMBOL FIFTY TALENTS
1014B	ATTIC ACROPHONIC SYMBOL ONE HUNDRED TALENTS
1014C	ATTIC ACROPHONIC SYMBOL FIVE HUNDRED TALENTS
1014D	ATTIC ACROPHONIC SYMBOL ONE THOUSAND TALENTS
1014E	ATTIC ACROPHONIC SYMBOL FIVE THOUSAND TALENTS
1014F	ATTIC ACROPHONIC SYMBOL FIVE STATERS
10150	ATTIC ACROPHONIC SYMBOL TEN STATERS
10151	ATTIC ACROPHONIC SYMBOL FIFTY STATERS
10152	ATTIC ACROPHONIC SYMBOL ONE HUNDRED STATERS
10153	ATTIC ACROPHONIC SYMBOL FIVE HUNDRED STATERS
10154	ATTIC ACROPHONIC SYMBOL ONE THOUSAND STATERS
10155	ATTIC ACROPHONIC SYMBOL TEN THOUSAND STATERS
10156	ATTIC ACROPHONIC SYMBOL FIFTY THOUSAND STATERS
10157	ATTIC ACROPHONIC SYMBOL TEN MNAS
10158	HERAEUM ACROPHONIC SYMBOL ONE PLETHON
10159	THESPIAN ACROPHONIC SYMBOL ONE
1015A	HERMIONE ACROPHONIC SYMBOL ONE
1015B	<b>EPIDAUREAN ACROPHONIC SYMBOL TWO</b>
1015C	THESPIAN ACROPHONIC SYMBOL TWO
1015D	CYRENAIC ACROPHONIC SYMBOL TWO DRACHMAS
1015E	EPIDAUREAN ACROPHONIC SYMBOL TWO DRACHMAS
1015F	TROEZENIAN ACROPHONIC SYMBOL FIVE
10160	TROEZENIAN ACROPHONIC SYMBOL TEN TYPE ONE
10161	TROEZENIAN ACROPHONIC SYMBOL TEN TYPE TWO
10162	HERMIONIAN ACROPHONIC SYMBOL TEN
10163	MESSENIAN ACROPHONIC SYMBOL TEN
10164	THESPIAN ACROPHONIC SYMBOL TEN
10165	THESPIAN ACROPHONIC SYMBOL THIRTY
10166	TROEZENIAN ACROPHONIC SYMBOL FIFTY TYPE ONE
10167	TROEZENIAN ACROPHONIC SYMBOL FIFTY TYPE TWO
10168	HERMIONIAN ACROPHONIC SYMBOL FIFTY
10169	THESPIAN ACROPHONIC SYMBOL FIFTY
1016A	THESPIAN ACROPHONIC SYMBOL ONE HUNDRED
1016B	THESPIAN ACROPHONIC SYMBOL THREE HUNDRED
1016C	EPIDAUREAN ACROPHONIC SYMBOL FIVE HUNDRED
1016D	TROEZENIAN ACROPHONIC SYMBOL FIVE HUNDRED
1016E	THESPIAN ACROPHONIC SYMBOL FIVE HUNDRED
1016F	CARYSTIAN ACROPHONIC SYMBOL FIVE HUNDRED
10170	NAXIAN ACROPHONIC SYMBOL 500 FIVE HUNDRED
10171	THESPIAN ACROPHONIC SYMBOL ONE THOUSAND
10172	THESPIAN ACROPHONIC SYMBOL FIVE THOUSAND
10173	DELPHIC ACROPHONIC SYMBOL FIVE MNAS
10174	STRATIAN ACROPHONIC SYMBOL FIFTY MNAS



Example of Acrophonic Numerals in modern scholarship<sup>7</sup>

I = 1	ΔΔ = 20	HH = 200
II = 2	ΔΔΓ = 25	Π = 500
III = 3	ΔΔΔ = 30	ΠH = 700
IIII = 4	Π = 50	ΠHHΓI = 706
Γ = 5	ΠΓ = 55	X = 1000
ΓI = 6	ΠΔ = 60	XX = 2000
ΓII = 7	ΠΔΔI = 71	Π = 5000
Δ = 10	H = 100	M = 10,000
ΔII = 12	HΔ = 110	MM = 20,000
ΔΓ = 15	HΔI = 111	
ΔΓI = 16	HΠ = 150	
	MMΠXXIΠHΠΔΔΓIII = 27,678	
C = 1/2 obol	I = 1 obol	† = 1 drachma
T = 1 talent	Π = 5 talents	ϕ = 10 talents
ϕϕ = 20 talents	ϕϕTTXΠHΠΔ††II = 22 tal. 1662 dr. 2 obols	
Π = 50 talents	†† = 100 talents	ξ = 1000 talents
6 obols = 1 drachma	100 drachmae = 1 mina	
	6000 drachmae = 1 talent	
ξ = 1 stater	Π = 5 staters	Δ = 10 staters

<sup>7</sup> Woodhead, A.G., *The Study of Greek Inscriptions* 2<sup>nd</sup> edn. (Cambridge, 1981) 110