

# Test Greek LaTeX internal character representations (LICR macros)

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2023/03/08

This document tests the compatibility of “luainputenc” and the Greek font setup for TU and PU. It uses only ASCII input.

See the source `test-inputenc.tex` for the input used in the examples.

TODO: Compiling with LuaTeX fails: `tuenc-greek.def` uses literal Unicode characters which is incompatible with legacy 8-bit encodings defined via "luainputenc".

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2.1	0374 ' , ; ' ^ ' A ' E H T O ' Y M i	5
2.2	0391 A B G D E Z H T H I K A M N E O I P P S T Y F X P S I	5
2.3	03AA I Y ^ a e h i t o	5
2.4	03B1 a b g d e z h i t h k l m n x o p r s t u p h c h s o	5
2.5	03CA u o s u w b t p p i f f f l l l a r h r e	5
2.6	1F00 a a a a a a A A A A A A A A	5
2.7	1F10 e e e e e E E E E E E	5
2.8	1F20 h h h h h h H H H H H H H H	5
2.9	1F30 i i i i i I I I I I I I	5
2.10	1F40 o o o o o O O O O O O	5
2.11	1F50 u u u u u U U U U U U	5
2.12	1F60 w w w w w W W W W W W	5
2.13	1F70 a a e e h h i i o o u u w w	5
2.14	1F80 a a a a a A A A A A A A A A A	5
2.15	1F90 h h h h h H H H H H H H H H H	5
2.16	1FA0 o o o o o O O O O O O O O O O	5
2.17	1FB0 a a a a a A A A A A A A A A A	5
2.18	1FC0 ~ ~ h h h h h E E H H H H A A	5



ligature definition (set the Babel language or wrap in `\ensuregreek`):  $A_{\iota}$  but  $\Lambda_{\cdot}$ .

The shape and position of the mute iota with pre-composed capital letters depends on the selected font, both sub-iota and adscript iota are possible.

- `\prosgegrammeni` sets an adscript iota (GREEK PROSGEGRAMMENI), e.g.  $A_{\iota}$ . In Unicode fonts the `prosgegrammeni` is spaced similar to the letter iota. In the CB Greek fonts, the only visible difference to the pre-composed characters is a slightly increased spacing.

Copy/Paste may convert the adscript iota to a small letter iota!

`\ypogegrammeni` and `prosgegrammeni` following matching/not-matching base character (unchanged, lowercase, uppercase):

$A_{\iota}A_{\iota}$   $\alpha\alpha$   $A_{\iota}A_{\iota}$   
 $\Lambda_{\cdot}\Lambda_{\cdot}$   $\lambda\lambda$ ,  $\Lambda_{\cdot}\Lambda_{\cdot}$   
 $\alpha\alpha_{\iota}$   $\alpha\alpha$   $A_{\iota}A_{\iota}$

Using `\ypogegrammeni` for the mute iota with both, small and capital letters usually gives better results.

### 1.3 Additional Greek symbols

#### 1.3.1 symbols for Greek numbers

$\text{\textkappa}$  `textkoppa`  
 $\text{\textKoppa}$  `textKoppa`  
 $\text{\textqoppa}$  (archaic koppa) `textqoppa`  
 $\text{\textQoppa}$  (archaic Koppa) `textQoppa`  
 $\text{\textstigma}$  `textstigma`  
 $\text{\textStigma}$  (Sigma-Tau-Ligature in CB-fonts)<sup>1</sup> `textStigma`  
 $\text{\textsampi}$  `textsampi`  
 $\text{\textSampi}$  `textSampi`  
 $\text{\textdigamma}$  `textdigamma`  
 $\text{\textDigamma}$  `textDigamma`  
 $\text{\textdexiakeraia}$  `textdexiakeraia`  
 $\text{\textaristerikeraia}$  `textaristerikeraia`

#### 1.3.2 generic text symbols

LICR macros for some symbols from the 8-bit font encoding LGR that are not confined to Greek but not defined in `tuenc.def` [2018/08/11 v2.0j].

$\text{\textsemicolon}$  `textsemicolon`  
 $\text{\textmicro}$  `textmicro`  
 $\text{\textschwa}$  `textschwa`

The SI unit prefix MICRO SIGN is not upcased with `MakeUppercase`:

`textmu`:  $\mu \mapsto M$  but `textmicro`:  $\mu \mapsto \mu$ .

<sup>1</sup>the name “stigma” originally applied to a medieval sigma-tau ligature, whose shape was confusingly similar to the cursive digamma

text		mathematics	
macro	output	macro	output
<code>\textpi</code>	$\pi$	<code>\pi</code>	$\pi$
<code>\textvarpi</code>	missing	<code>\varpi</code>	$\varpi$
<code>\textpisymbol</code>	$\pi$		
<code>\textrho</code>	$\rho$	<code>\rho</code>	$\rho$
<code>\textvarrho</code>	missing	<code>\varrho</code>	$\varrho$
<code>\textrhosymbol</code>	$\rho$		
<code>\texttheta</code>	$\vartheta$	<code>\theta</code>	$\theta$
<code>\textvartheta</code>	missing	<code>\vartheta</code>	$\vartheta$
<code>\textthetasymbol</code>	$\vartheta$		
<code>\textepsilon</code>	$\varepsilon$	<code>\epsilon</code>	$\epsilon$
<code>\textvarepsilon</code>	missing	<code>\varepsilon</code>	$\varepsilon$
<code>\textepsilonsymbol</code>	$\varepsilon$		
<code>\textphi</code>	$\varphi$	<code>\phi</code>	$\phi$
<code>\textvarphi</code>	missing	<code>\varphi</code>	$\varphi$
<code>\textphisymbol</code>	$\varphi$		
<code>\textbeta</code>	$\beta$	<code>\beta</code>	$\beta$
<code>\textvarbeta</code>	missing	<i>missing</i>	
<code>\textbetasymbol</code>	$\beta$		
<code>\textkappa</code>	$\varkappa$	<code>\kappa</code>	$\kappa$
<code>\textvarkappa</code>	missing	<code>\varkappa</code>	$\varkappa$
<code>\textkappasymbol</code>	$\varkappa$		
<code>\textTheta</code>	$\Theta$	<code>\Theta</code>	$\Theta$
<code>\textvarTheta</code>	missing	<i>missing</i>	
<code>\textThetasymbol</code>	$\Theta$		

Table 1: Macros for Greek symbol variants

