

Ephesios[™]
**Byzantine music symbol
computer font set**

User's Guide

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GETTING STARTED

Introduction

What's in a name?

Why the name Ephesios? The Ephesios Byzantine Music Symbol computer font set is named after the publisher of the first printed Byzantine Music publication, Petros Manuel Ephesios. Studying both sacred and secular music under Georgios the Cretan and in the Third Patriarchal School of Music, Petros Ephesios was recognized for his musical skills and in 1816 was taken on as teacher of music at the Royal School of Music of Bucharest, where he remained until his death in 1840.

Writing in the Introduction of the *Neon Anastasimatarion*, Petros relates how in observing the amount of time consumed by his students for the mundane task of copying the necessary texts required to learn and chant the New Method of ecclesiastical notation of the Three Teachers Chourmouzos, Chrysanthos and Gregorios the Protopsalte, he sought out financial support from subscribers and a certain great benefactor, Gregory Ballianos, after which he employed the services and talent of a certain goldsmith Serapheim Christodoulos who tooled the typeface characters used in the printing press. After four years of work Petros published the first ever printed Byzantine Music scores in Bucharest, in 1820. There were two publications in the same year: the *Neon Anastasimatarion* and *Syntomon Doxastarion*, both with the melos of Petros Lambadarios the Peloponnese and the exegesis of Gregorios the Protopsaltes, after whose hand the typefaces of the two publications were modelled. The typefaces in the two publications are not identical. The characters were refined for the *Doxastarion* and it is from this second publication that the Ephesios fonts were created.

The Ephesios Byzantine Music Symbol computer font set is stylistically based on these historic first printed Byzantine Music publications. The type commissioned and used by Petros Ephesios is unique in that it retains the quality and nuances of the hand written Byzantine Music characters found in the treasured Byzantine Music manuscripts scattered throughout the world and residing in such holy places as Mount Athos and the God-trodden Mount of Sinai. For this reason, Petros Ephesios' experienced eye and hard work has been drawn from in order to lend traditional beauty to the Ecclesiastical scores you will create using it, whether they be compilations of ancient traditional melodies or variations of the ancient liturgical art in "new and strange tongues." 

Before Using the Ephesios font set

Before using the *Ephesios* Byzantine Music fonts read this *User's Guide* and familiarize yourself well with the keystroke charts in the second part of this publication.

Install the seven separate Ephesios fonts

The Ephesios fonts have been created for both Macintosh® and Windows® computer operating systems. They are in both TrueType® and PostScript® formats for your to choose from.

In order to install the fonts you should consult your operating system manual.

You will find the following files on your Ephesios disks:

* **Macintosh files.** *PostScript files:* EphesArc, EphesArchtika.bmap, EphesCom, EphesComb.bmap, EphesHro, EphesHronos.bmap, EphesKra, EphesKratema.bmap, EphesMai, EphesMain.bmap, EphesPht, EphesPhtExp, EphesPhthora.bmap, EphesPhthoraExpert.bmap.

TrueType files: EphesArchtika.suit, EphesComb.suit, EphesHronos.suit, Epheslson.suit, EphesMain.suit, EphesPhthora.suit, EphesPhthoraExpert.suit.

* **Windows files.** *PostScript files:* EPHEA____.INF, EPHEA____.PFB, EPHEC____.INF, EPHEC____.PFB, EPHEH____.INF, EPHEH____.PFB, EPHEK____.INF, EPHEK____.PFB, EPHEM____.INF, EPHEM____.PFB, EPHEPE____.INF, EPHEPE____.PFB, EPHEP____.INF, EPHEP____.PFB.

TrueType files: EPHEA____.INF, EPHEA____.TTF, EPHEC____.INF, EPHEC____.TTF, EPHEH____.INF, EPHEH____.TTF, EPHEK____.INF, EPHEK____.TTF, EPHEM____.INF, EPHEM____.TTF, EPHEPE____.INF, EPHEPE____.TTF, EPHEP____.INF, EPHEP____.TTF.

You will find the Windows files in the PC folder and Macintosh files in the MAC folder. Within each of these folders are two folders, one named PS for PostScript and the other TT for TrueType. Install either the TrueType or PostScript files into the same system, not both! Installing both PostScript and TrueType fonts on the same system will eventually give you a good headache.

Making sure your program is ready

Once you've installed the TrueType or PostScript fonts for your operating system you're ready to open your favorite word processing or page layout program and create your Byzantine Music publications. Before doing so, however, make sure all automatic correcting and formatting options are turned off! This includes such features that would automatically change simple quotes into typographer or "curly" quotes, or any other options that automatically check and correct spelling and formatting as you type. Check your software manual to learn how to do this.

Also, since you will no doubt be writing lyrics to your scores, you'll need to plan your publication by beginning with the proper page setup size, orientations and margins. Finally, once you are ready to add words to your scores you'll need to work in a page layout of page viewing mode in order to correctly line up the words under the characters. This is a little tricky in the beginning, but in time you'll acquire the skill.

Some abbreviations

a. Throughout this *User's Guide* and the keystroke charts use is made of the following key stroke abbreviations:

Option = O Option+Shift = SO

On some computer keyboards the Option command may be the same as the "alt" key. In any event, the none command means that the key is pushed without holding down any other key. The shift command is usually expressed using the capital of a particular letter of the corresponding symbol that one would get when normally holding down the shift key and typing a letter. The option command means that you type the character holding down the option key at the same time. The option+shift commands means that you must hold down both the option and shift keys at the same time while typing the designated letter.

b. The composite key characters are slightly different. They always begin with holding down the option key and striking one of the following keys:

 ` e u i n

After this first combination a second key is typed, one of the following:

 e u i o a spc y,n

These types of composite characters will be expressed in the following manner: O`u, Ouu, Ooa, etc.

- c. The positioning abbreviations express the placement of a particular Byzantine music symbol within the Em square (this is the outer square around the letter). The expression of this positioning is as follows:

mesi = /m ano = /a kato = /k

mesi dexia = /md ano dexia = /ad

kato dexia = /kd ano aristera = /aa

Further support

Updates to this *User's Guide* will be made available on the *PsalticNotes* web site which is accessed through the following address:

<http://users.forthnet.gr/ath/frc/psfonts.html>



USING THE *EPHESIOS* FONT SET

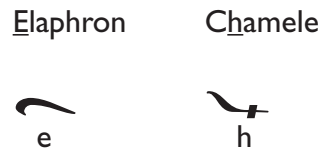
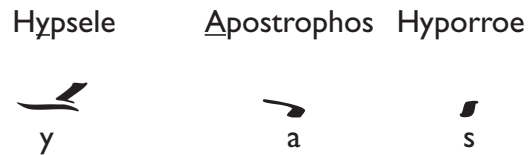
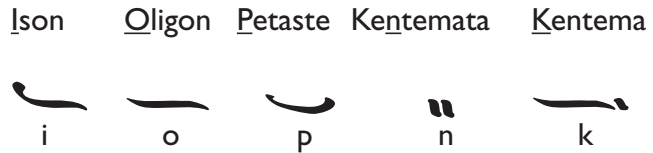
A general overview

The Ephesios Byzantine Music Symbol font set, as we have seen above, is actually made up of seven separate font files. Each font has a specialized use and, hence, a unique logic by which it has been ordered. It will take a little time to learn the various fonts in the Ephesios font set. The key is understanding the logic behind each font. This is what is explained below. After you have familiarized yourself with each font refer to the keystroke charts at the end of this User's Guide.

EphesiosMain is just that, the main font. This is where you'll find the 10 basic characters of the New Method along with other basic phthorae, time signatures and accidentals. Most simple combinations will be made using EphesiosMain; this keeps your moving from font to font to a minimum. EphesiosCombination provides all the necessary combinations for steps over four voices. EphesiosPhthora supplies access to all the various phthorae, chroea, martyriae and more while the EphesiosMartyriaExpert font contains the already combined most commonly used martyriae that you will need. EphesiosKratema contains the letters, numbers and characters needed to add isokratemata and rhythmic measure symbols to your music. EphesiosArchtika contains the archtikae (beginning) martyriae for all the various tones which are needed at the beginning of each score. Finally, EphesiosHronos contains over 130 variations of the gorgon and argon (characters of chronos or time) in seven different positions. Now let's take a closer look.

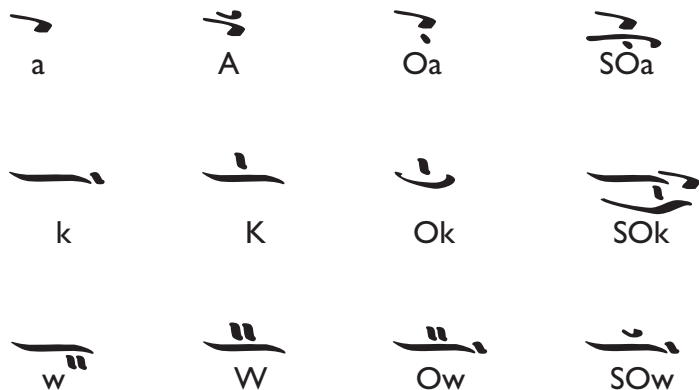
EphesiosMain

EphesiosMain is where you'll do most of your typing. It contains the 10 basic characters of the New method along with the most basic combinations of characters, phthorae and time signatures. Their names are connected with their keystroke.



As you can see, the keystrokes for these most basic characters have been associated with the names of each characters (notice the underlined letters). There are some cases, as the case of the hyporroee, where the keystroke can be interpreted as reminiscent of the shape of the particular character (i.e., 's' for the hyporre and 'f' for the antikenoma).

Furthermore, these basic characters can be combined with the phthorae and hypostases characters. Some of the most common combinations have already been made for you. Here are a few. The rest can be learned by studying the keystroke chart at the end of this *User's Guide*.



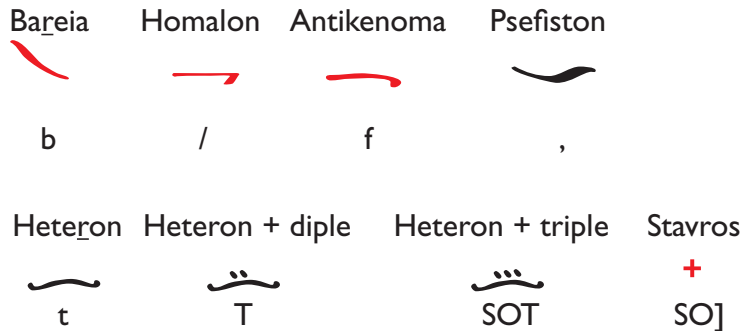


Those are some of the most basic characters. In time and after spending some time with the fonts and their keystroke charts you'll see how easily many of these basic characters progress when using the shift, opt and opt-shift combinations. For instance, if the shift key is held down when typing 'i' ('i' is for Ison), the psepheston comes up under the ison as so:

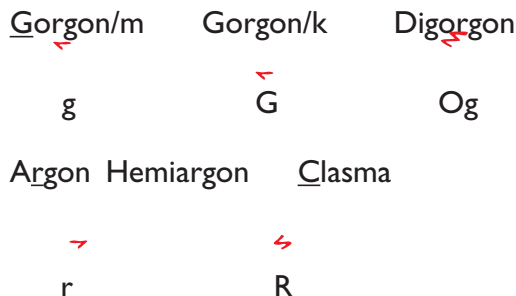


Even though typing 'i' and ',' (comma) will produce the same result, common combinations such as this have already been made for you. This saves you time and reduces the chances of having to make any extra kerning or spacing.

Some of the basic key assignments for the characters of hypostasis are as follows:



Thirty six of the most common usages for the gorgon and argon, along with usages of the phthorae, diesis, hyphesis and the clasma has been added to the EphesiosMain font to keep switching between fonts to a minimum, saving time. Here are some of the most basic:



Aple Diple Diesis Hyphesis

· ‘‘ ♂ ♀
d D + -

At this point special attention should be given to the use of the gorgon and argon. Apart from the desired positioning of said characters, the varying widths of the different Byzantine music symbols also affect which positioning of a gorgon or argon we will use. For instance, the apostrophos is less wide than the oligon and the kentemata are much smaller than a petaste. Hence, even though we may want to place a gorgon on the *mesi* position over the apostrophos we must use the *mesi dexia* to get the desired result. Example:

with the *mesi gorgon* ('g') 

with the *mesi dexia* ('l') 

Another example. To place a gorgon on the kentemata of a combination made on the oligon the *anoxia* position should be used. For the simple gorgon this would be the SO6 key combination.



The Hronos key characters chart (chart c. for EphesiosMain) will be very useful in this area.

A few more special combinations. Most importantly, and this goes for all the fonts in the Ephesios Byzantine Music symbol set, special care has been taken to create the metrics for each sign so that you can create perfectly spaced combinations using the traditional two color scheme. You may ask exactly what this means.

Anyone who has had the opportunity to actually see Byzantine or Post-Byzantine manuscripts of the Psaltic Art is immediately struck by the visual beauty of the musical notation as it was skillfully executed by codex scribes and actual chant composers. The use of red for the *pneumata* or spirits (i.e. gorgon, martyria, lygisma, etc.) and other *aphona* signs adds a dimension of beauty and delicacy to the score. Well, all the Ephesios fonts have been specially tooled to allow you to publish with the same beauty.

Signs not belonging to the New Method. The study of older, pre-New Method Byzantine and Post-Byzantine chant notations has flowered

over the past few decades. This has brought a new awareness to those who compose, chant and publish today. Whether it be for a scholarly article, a music publication or just some performance scores, many writers are today utilizing some older notational signs. Specifically, EphesiosMain gives you the ability to use the following exegetic pre-New Method notational signs: the lygisma, the isaki, the red bareia, the tromikon and the ekstrepton. Here are their positions:



They can also be found in the following combinations:



Lastly, you'll notice on the keystroke chart in the back of this book that some combinations or single signs are placed in more than one keystroke position. The reason for this is that the same sign, when used in different combinations, may need to be of a slightly different size or in a varied position. This is especially true for the use of the homalon, heteron and psefeston. Below are the special situations Ephesios recognizes.

the homalon

In the New Method there are times when the homalon is placed between two signs and other times when it must be placed directly under a single sign or combination. Therefore for the first instance you will use the '/' keystroke after your first sign or combination before your second sign for the following result:



In order to place the homalon directly under a sign, however, use the OS/ keystroke. This will produce the following results:



the antikenoma and hagle

While most combinations with the hagle are created with the Of and

OSf keystrokes—the first sits a little lower than the second—a special combination of the apostrophos with the antikenoma and hagle was necessary due to the smaller size of the apostrophos:



psefeston with heteron or clasma

The psefeston can be especially tricky, since it is used in a variety of combinations. It was, therefore, necessary to create some specially tweaked versions of the psefeston, especially for use with the heteron:



It was also necessary to create a special combination of the psefeston with the clasma:



Any other tweaking needed can be accomplished by manually kerning your notational signs, just as you would any other font.

EphesiosCombination

EphesiosCombination contains over fifty combination characters, especially those expressing steps of over three. Additionally, combinations with the Oxeia and dyo apostrophoi, characters not officially part of the New Method, but nevertheless still used today by many scribes (Petros Ephesios' first publication, the Anastasematarion, made use of this symbol). There are no 'tricks' to using this font. Referring to the keystroke chart will teach you all you need to know.



EphesiosHronos

The EphesiosHronos font contains a full array of normal and parestigmata gorga, digorga, etc. in all seven positions. It's easy-to-use keystroke chart is self-explanatory. It is organized according to sign along the top and position along the first column.

EphesiosMartyriaExpert

The EphesiosMartyriaExpert font contains over sixty of the most common martyriae, already combined for quick access. All other martyria combinations can be directly created with the next font discussed below—EphesiosPhthora. The logic behind the key assignment of these martyriae is as follows.

Assignment is based on the voice—*pa*, *bou*, *ga*, *di*, *ke*, *zo*, *nh*. The martyriae for *pa* are on the top row of keys (i.e., the numbers rows that begins: 1, 2, 3...). The martyriae for *bou* on the second row of keys (i.e., q, w, e...). It follows that the martyriae for *ga* and *di* are on the next two rows. For the martyriae of *di*, *ke*, *zo* and *nh* we again begin from the top row, but hold down the shift key, thus:

1	2	3	4	5	6	7	8	9	
q	w	e	r	t	y				
a	s	d	f	g	h	j	k		
z	x	c	v	b	n	m	,	.	/
Q	W	E	R	T	Y	U	I	O	
A	S	D	F	G	H	J	K		
Z	X	C	V	B	N	M	<	>	?

EphesiosPhthora

EphesiosPhthora supplies a full selection of phthorae and chroea along with the ability to create any martyria combination necessary. For explanatory purposes let's take the martyria for *pa* in the First Tone. The basic rule here is to always start with the symbol and then add the note's name. So, type '1' first for the protos echos martyria

sign and then 'Shift A' for the note's name.

1A



The martyria will not be spaced correctly if you make it the other way around. The second rule is that the lower (kato) positions are on the none and option keystrokes while the upper (ano) positions are on the shift and opt-shift keystrokes.

Finding the arktika signs for the names of the voices is easy. Each sign is on an easy to remember key:

a	b	g	d	k	z	n

Furthermore, most of the martyria signs are found on the keyboard numbers row. As mentioned above, holding down the Shift key places the sign in the *ano* position.

1	2	3	4	5	6	7	8	9	0	

O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	

Of course, as the font's name states, you'll also be able to add the various chroai and phthorai necessary for your Byzantine notation publications using the keystroke chart.

EphesiosKratema

The EphesiosKratema font supplies you with the symbols needed to create isokratema markings in Byzantine Music scores. Two styles of isokratema marking have been supplied for:

and

The voice symbols are found on their respective keys and progress to the upper and lower tetrachord indications with the use of the shift and option keys as so:

or if you want the plain form, as so:

π	π'	π↓
O/	S/	OS/

Ephesioslson also provides measure markings and numbers:

			↑
\		0	t

Also provided are the special phonetic kratema symbols:

l	∩
e	f

EphesiosArchtika

Finally, the EphesiosArchtika font provides the last necessary element for our Byzantine Music score, the beginning martyria signatures. As the EphesiosPhthoraExpert font and its key row assignments, EphesiosArchtika assigns in order of regularity from left to right already combined beginning tone signatures. Tone one is on the top row while the plagal of the first tone is on the top row using the shift key. Tone two on the second row (i.e., q, w, e...), tone three on the third (a, s, d...) and so on.

l	q	a	z	!	Q	A	Z

Also in EphesiosArchtika are the agogi symbols and simansis theseos and arseos signs.

Ouu	Ot	SO8	O`u	Oeu	Ono	Ouo	
1	i	ï	ï	o	ò	ö	ö
SO0	SOw	SO _r	SO _m	SO5	SO6	SO7	SO9

A Final Word

The Ephesios Byzantine Music TrueType® and PostScript® computer fonts are a labor of love. They were created out of a deep respect for the precious treasure of our most blessed psaltic art. There is a bit of a learning curve to using the fonts, but once you begin printing your own Byzantine Music scores precisely the way you want them, I'm sure you'll come to appreciate Ephesios' true value. Your professionally prepared and printed music will give you pride in your texts and inspire others with its beauty.

Ephesios font User's Guide

It goes without saying, but I'll say it anyway. Should you find that a particular combination has not been accounted for (I'd be surprised if someone didn't as I am constantly adding combinations for my own use), please contact me and we'll get it in there.

It is this author's aspiration and prayer that the Ephesios Byzantine Music fonts encourage and animate the dissemination and furtherance of the grace-filled inheritance, which is the blessed hymnographer and chant of the Greek Orthodox Church in its service to the *logike* veneration of the All-holy Trinity.

Σοὶ πρέπει ὕμνος τῷ Θεῷ.

Byronas, Greece, 1999.

THE KEYSTROKE CHARTS

EphesiosMain

a. full layout

Key	None	Shift	Opt	Opt-Shft
a				
b				
c	/m	/k	/ma	/ka
d				
e				/md
f				/ma
g	/m	/k	/m	/m
h				
i				
j				
k				

Key	None	Shift	Opt	Opt-Shft
l				
m				
n	/m	/a		/k
o				
p				
q				
r	/m	/m	/m	/md
s				
t				
u				
v				

Ephesios font User's Guide

Key	None	Shift	Opt	Opt-Shft
w				
x	/a	/md	/kd	
y				
z				
,	/m			/md
1	/md	/kd	/md	/ad
2	/md	/kd	/md	/ad
3	/md	/kd	/md	/ad
4			/md	/ad
5			/md	/ad
6				/ad

Key	None	Shift	Opt	Opt-Shft
7				/ad
8			/m	/ad
9			/m	/ad
0			/m	/ad
-			/m	
=			/k	
[
]			/kd	
.				
;				
\				

Ephesios font User's Guide

Key	None	Shift	Opt	Opt-Shft
,				,
.				
/				

b. composite key characters

	Plus 2nd Key						
Ist Key	e	u	i	o	a	Spc	y,n
Opt+`		/md	/a	/a	/k		
Opt+e		/md	/a	/a			
Opt+u	/a		/a	/a	/k		
Opt+i			/a	/a	/k		
Opt+n				/a			/a

	Plus 2nd Key		
Ist Key	O	A	U
Opt+`		Ɔ	
Opt+n	Ɔ	Ɔ	
Opt+u	Ɔ		Ɔ
Opt+i	Ɔ	Ɔ	Ɔ

c. chronos key characters

	1	1	1	2	2	2	2	2	2	2	3	3	3
mesi	g	O8	O9	Og		O0	O-	SOg			r	R	Or
ano	Oue	Oeo	O`o	Oei	Oio	Ouo	Ono	O`i			Oii	Oui	Ony
kato	G	O=	O0	O`a		Oua	Oia						
mesi dexia	l	O1	O2	2	O3	O4	O5	3			Oeu	O`u	SO r
ano dexia	SO6	SO1	SO2	SO7	SO3	SO4	SO5	SO8	SO9	SO0			
kato dexia	!	@	#	O]									

d. positioning abbreviations

mesi	ano	kato	mesi dexia	ano dexia	kato dexia	ano aristera
/m	/a	/k	/md	/ad	/kd	/aa

EphesiosHronos font keystroke chart

a. full layout

	z	Z	Oz	a	A	Oa	SOa	k	q	Q	Oq	SOq	1	S1	SO1	8	O`e	O`i	P	z
	x	X	Ox	s	S	Os	SOS	l	w	W	Ow	SO-w	2	S2	SO2	9	O`a	Oei	Oio	
	c	C	Oc	d	D	Od	SOD	;	e	E	Oee	SOe	3	S3	SO3	0	O	Oui	K	
mesi dexia	v	V	Ov	f	F	Of	SOf	'	r	R	Or	SOr	4	S4	SO4	-	Oie	Oij	Oea	
ano dexia	b	B	Ob	g	G	Og	SOg	i	t	T	Ot	SOT	5	S5	SO5	=	O`u	O`o	Oua	
kato dexia	n	N	Om	h	H	Oh	SOh	o	y	Y	Oy	SOy	6	S6	SO6	[Oeu	Ouo	Oia	
ano aristera	m	M	O,	j	J	Oj	SOj	p	u	U	Oue	SOU	7	S7	SO7]	Ouu	Oeo	Ona	

b. Seven position classifications:

mesi	ano	kato	mesi dexia	ano dexia	kato dexia	ano aristera
س	ا	ك	م	ن	ه	و

EphesiosPhthora font keystroke chart


Key	None/k	Shift/a	Opt/k	Opt-Shft/a
a	Ɱ	Ɱ		
b	Ɱ	Ɱ		
c	Ɱ	Ɱ	Ɱ	Ɱ
d	Ɱ	Ɱ		
e	Ɱ	Ɱ		
f	Ɱ	Ɱ		
g	Ɱ	Ɱ		
h	Ɱ	Ɱ		
i				
j	Ɱ	Ɱ		
k	Ɱ	Ɱ		

Key	None/k	Shift/a	Opt/k	Opt-Shft/a
l				
m				
n	Ɱ	Ɱ		
o	Ɱ	Ɱ	Ɱ	Ɱ
p	Ɱ	Ɱ	Ɱ	Ɱ
q	Ɱ	Ɱ	Ɱ	Ɱ
r				
s	Ɱ	Ɱ	Ɱ	Ɱ
t	Ɱ	Ɱ	Ɱ	Ɱ
u	Ɱ	Ɱ		
v	Ɱ	Ɱ	Ɱ	Ɱ

Ephesios font User's Guide

Key	None/k	Shift/a	Opt/k	Opt-Shft/a
w				
x				
y				
z				
,				
l				
2				
3				
4				
5				
6				

Key	None/k	Shift/a	Opt/k	Opt-Shft/a
7				
8				
9				
0				
-				
=				
[
]				
'				
;				
\				

Key	None/k	Shift/a	Opt/k	Opt-Shft/a
,				
.				
/		↑		"

EphesiosMartyriaExpert font keystroke chart

Key	None	Shift
a	ʀ ʁ	ʒ ʔ
b	ʌ ʁ	ʋ ʔ
c	ʌ ʁ	ʋ ʁ
d	ʀ ʁ	ʒ ʁ
e	ʒ ʁ	ʔ ʁ
f	ʀ ʁ	ʒ ʁ
g	ʀ ʁ	ʒ ʔ
h	ʀ ʁ	ʒ ʁ
j	ʀ ʁ	ʒ ʁ
k	ʀ ʁ	ʒ ʁ
m	ʌ ʁ	ʋ ʁ
n	ʌ ʁ	ʋ ʁ

Key	None	Shift	Opt
q	ʒ ʁ	ʐ ʁ	
r	ʀ ʁ	ʒ ʁ	
s	ʀ ʁ	ʒ ʁ	
t	ʒ ʁ	ʐ ʁ	
u		ʀ ʁ	
v	ʌ ʁ	ʋ ʁ	
w	ʒ ʁ	ʐ ʁ	
x	ʐ ʁ	ʋ ʁ	
y	ʒ ʁ	ʐ ʁ	
z	ʌ ʁ	ʋ ʁ	ʌ ʁ
l	ʀ ʁ		
2	ʀ ʁ		

Key	None	Shift
3	Ɔ	
4	Ɔ	
5	Ɔ	
6	Ɔ	
7	Ɔ	
8	Ɔ	
9	Ɔ	
,	Δ	∇
.	Δ	∇
/	Δ	∇

EphesiosCombination font keystroke chart

a. full layout

Key	None	Shift	Opt	Opt-Shft
a	ˆ	ˆ	ˆ	ˆ
b	ˆ	ˆ		
c	ˆ	ˆ	ˆ	ˆ
d	ˆ	ˆ		
e	ˆ	ˆ		
f	ˆ	ˆ		
g	ˆ	ˆ		
h	ˆ	ˆ		
i	ˆ	ˆ		
j	ˆ	ˆ	ˆ	ˆ

Key	None	Shift	Opt	Opt-Shft
k	ˆ	ˆ	ˆ	ˆ
l	ˆ	ˆ	ˆ	ˆ
m	ˆ	ˆ	ˆ	ˆ
n	ˆ	ˆ		ˆ
o	ˆ	ˆ	ˆ	ˆ
p	ˆ	ˆ	ˆ	ˆ
q	ˆ	ˆ	ˆ	ˆ
r	ˆ	ˆ	ˆ	ˆ
s	ˆ	ˆ	ˆ	ˆ
t	ˆ	ˆ		ˆ

Key	None	Shift	Opt	Opt-Shft
u				
v				
w				
x				
y				
z				
[
]				
`				

b. Composite Key Characters

	Plus 2nd Key						
Ist Key	e	u	i	o	a	Spc	y,n
Opt+`							
Opt+e							
Opt+u							
Opt+i							
Opt+n							

EphesiosArchtika font keystroke chart

a. full layout

Key	None	Shift	Opt	OptShft	Key	None	Shift	Opt	Opt-Shft
a					m				
b					n				
c					o				
d				v	p				
e					q				
f				π	r				
g					s				
h				ρ	t				
i					u				
j				Δ	v				
k					w				
l					x				

Ephesios font User's Guide

Key	None	Shift	Opt	Opt-Shft
y	ϐ'πα	ϐ'π'α	ϐ	ϐ
z	ϐ'ϐ	πλϐ'	πλϐ	
,				
l	ϐ'	πλϐ'		π
2	ϐ'ϐ'φωνος	πλ'α'		ϐ
3	ϐ'ϐ'	πλϐ'		ϐ
4	ϐ'	πλϐ'		Δ
5	ϐ'	πλϐ'	ϐ'	0
6	ϐ'	πλϐ'		0
7	ϐ'πλ'α'	ϐ'		Ö
8	ϐ'			χ
9	ϐ'			Ö

Key	None	Shift	Opt	Opt-Shft
0	α			1
-				
=			"	
[λε	ϐ'		
]	ϐ'			
'				ϐ'
;	ϐ'			
\				
,	ϐ'ϐ'	πλϐ'		
.	ϐ'Δ	πλϐ'		
/	ϐ'			

b. Composite Key Characters

	Plus 2nd Key						
Ist Key	e	u	i	o	a	Spc	y,n
Opt+`		̄χ					
Opt+e		̄χ					
Opt+u		̄χ		̄χ		̄	
Opt+i		μ χ					
Opt+n				̄χ			

EphesiosKratema font keystroke chart

Key	None	Shift	Opt
a	ⲁ	ⲁ'	ⲁ ^l
b	ⲃ	ⲃ'	ⲃ ^l
c			
d	ⲅ	ⲅ'	ⲅ ^l
e	Ⲇ		
f	ⲇ		
g	Ⲉ	Ⲉ'	Ⲉ ^l
h			
i			
j			
k	Ⲋ	Ⲋ'	Ⲋ ^l

Key	None	Shift	Opt	Opt-Shft
l				
m	ⲋ			
n	Ⲍ	Ⲍ'		Ⲍ ^l
o	ⲍ			
p				
q		Ⲏ		
r		ⲏ		
s	Ⲑ	ⲏ'		
t	ⲑ	ⲑ'		
u		Ⲓ		
v		ⲓ		

Ephesios font User's Guide

Key	None	Shift	Opt
w		N	
x		M	
y			
z	<u>z</u>	<u>Z</u>	<u>Z</u> [↓]
,			
1	1	π	
2	2	B	
3	3	Γ	
4	4	Δ	
5	5	K	
6	6	Z	

Key	None	Shift
7	7	N'
8	8	M
9	9	
0		
\		