

BYZANTINE MUSIC FORMULÆ

Plagal Fourth Mode - Heirmologic (Triphonos) *Canons*

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Key:

1 = accented syllable
0 = unaccented syllable
X = syllable that may be either
accented or unaccented

Variations of the same formula
are indicated in color

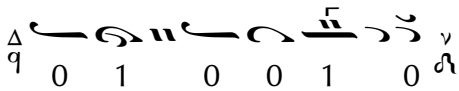
* The Byzantine music formulæ herein were extracted from all the heirmologic melodies found in the Zoe *Anastasimatarion* (14th edition, 2002), the *Heirmologion Katavasion* by Ioannis Protopsaltis (1903 edition), and the *Anastasimatarion* by Petros Peloponnesios (1869 edition). Note that these formulæ are applicable only to the canons. See our compilation at <http://www.stanthonysmonastery.org/music/Formula8t.pdf> for formulæ in heirmologic triphonos plagal fourth mode that are applicable to the apolytikia, kontakia, and kathismata.

Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

A) Medial Cadences on Nee

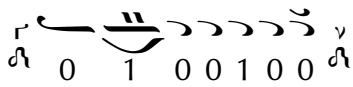
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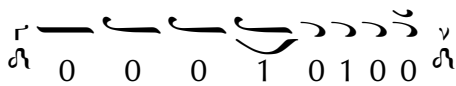
From Di

010010 


Accented on third to last syllable:

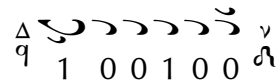
From Ga

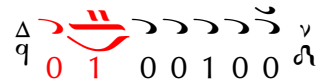
0100100 

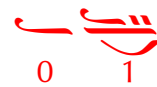
00010100 

From Di

10100 

100100 

0100100 



Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

B) Medial Cadences on Pa

Note: In the nineteenth-century publications on which these formulae are based, cadences on Pa in this mode are almost non-existent. This contrasts sharply with most contemporary oral traditions in which cadences on Pa are frequent.

Accented on second to last syllable:

From Di

0010

Δ
q

0 0 1 0 π
q

0 0 1 0 π
q

Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

C) Cadences on Ga

(These are also used as ending formulae)

Accented on last syllable:

From Nee

0 $\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{a}}$

01 $\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{a}}$

From Ga

00 $\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{a}}$

01 $\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{a}}$

$\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{a}}$

00100001 $\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{a}}$

0000100001 $\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{a}}$

1000100001 $\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{0}} \text{---} \overset{\vee}{\text{1}} \text{---} \overset{\vee}{\text{a}}$

$\overset{\vee}{\text{a}} \text{---} \overset{\vee}{\text{1}}$

From Di

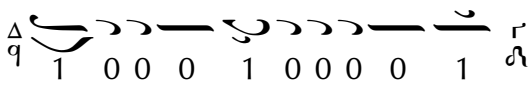
00 $\overset{\Delta}{\text{q}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{a}}$

10001 $\overset{\Delta}{\text{q}} \text{---} \overset{\Delta}{\text{1}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{1}} \text{---} \overset{\Delta}{\text{a}}$

0000100001 $\overset{\Delta}{\text{q}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{1}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{0}} \text{---} \overset{\Delta}{\text{1}} \text{---} \overset{\Delta}{\text{a}}$

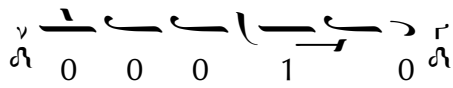
$\overset{\Delta}{\text{q}} \text{---} \overset{\Delta}{\text{1}}$

Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

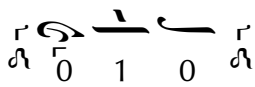
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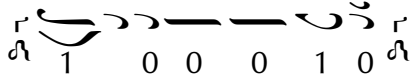
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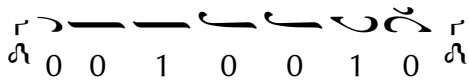
From Nee

00010 

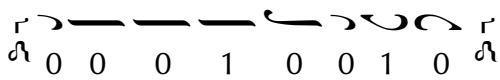
From Ga

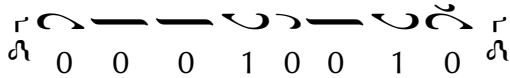
010 

100010 

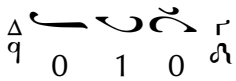
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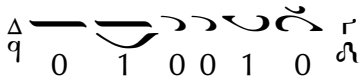
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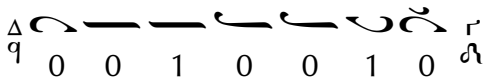
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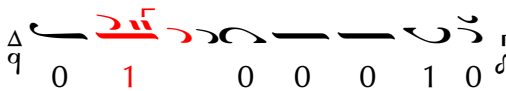

From Di


010 

010010 

0010010 

Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

0100010  

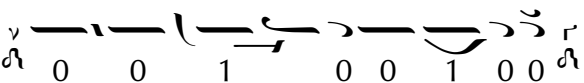
00010010 

From Ke


100010  

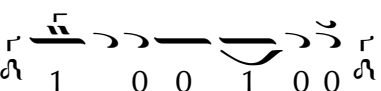
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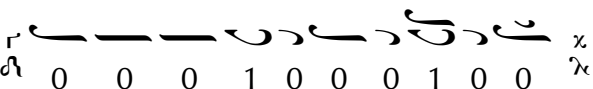
From Nee

00100100 

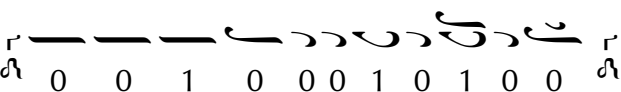
From Ga

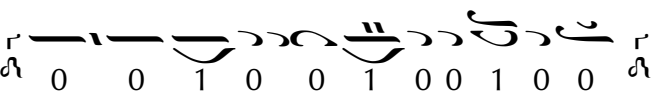
0100 

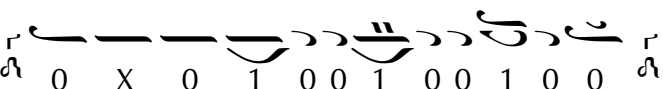
100100 

0001000100 

1000100100 

00100010100 

00100100100 

0X0100100100 

From Di

Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

100	Δ q 1 0 0 r
	Δ q 1 0 0 r
0100	Δ q 0 1 0 0 r
10100	Δ q 1 0 1 0 0 r
100100	Δ q 1 0 0 1 0 0 r
0100100	Δ q 0 1 0 0 1 0 0 r
00010100	Δ q 0 0 0 1 0 1 0 0 r
00100100	Δ q 0 0 1 0 0 1 0 0 r
01000100	Δ q 0 1 0 0 0 1 0 0 r
0010X0100	Δ q 0 0 1 0 X 0 1 0 0 r
100100100	Δ q 1 0 0 1 0 0 1 0 0 r
00100100100	Δ q 0 0 1 0 0 1 0 0 1 0 0 r
00X01000100	Δ q 0 0 X 0 1 0 0 0 1 0 0 r
10000100100	Δ q 1 0 0 0 0 1 0 0 1 0 0 r

Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

00X0100010100 $\overset{\Delta}{\underset{\lambda}{\rho}}$ ρ
 0 0 X 0 1 0 0 0 1 0 1 0 0

From Ke

00100 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 0 0 1 0 0

010100 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 0 1 0 1 0 0

100100 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 1 0 0 1 0 0

0010100 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 0 0 1 0 1 0 0

ρ
 0

0100100 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 0 1 0 0 1 0 0

00010X00 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 0 0 0 1 0 X 0 0

001000100 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 0 0 1 0 0 0 1 0 0

010010100 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 0 1 0 0 1 0 1 0 0

100100100 $\overset{x}{\underset{\lambda}{\rho}}$ ρ
 1 0 0 1 0 0 1 0 0

Accented on fourth to last syllable:

From Ga

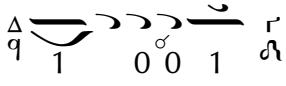
010001001 $\overset{\rho}{\underset{\lambda}{\rho}}$ ρ
 0 1 0 0 0 1 0 0

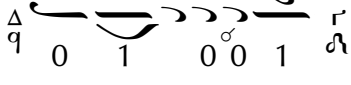
ρ
 1

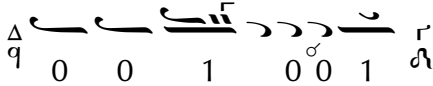
0100001001 $\overset{\rho}{\underset{\lambda}{\rho}}$ ρ
 0 1 0 0 0 0 1 0 0 1

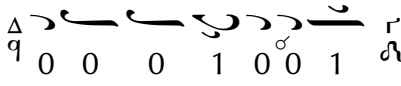
Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

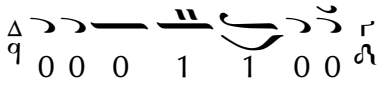
From Di

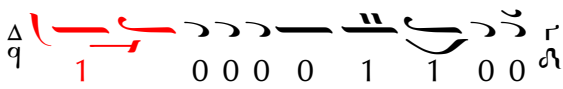
1001 

01001 

001001 

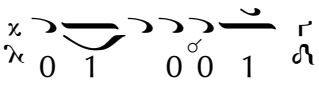
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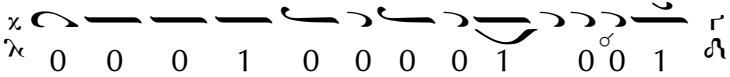
0001100 

100001100 


1

From Ke

01001 

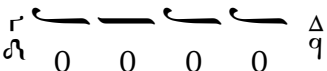
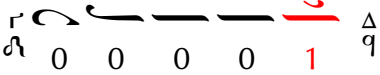

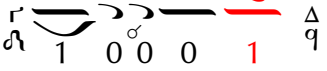

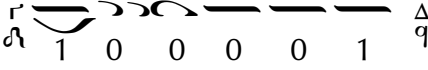

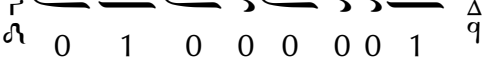
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Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

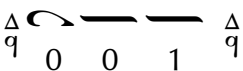
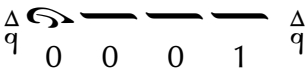
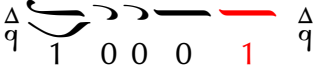

D) Medial Cadences on Di

Accented on last syllable:

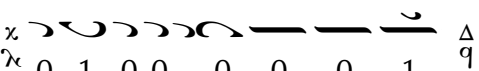
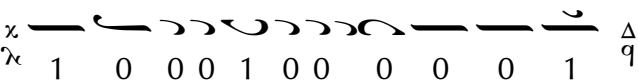
From Ga

0000	$\overset{\Delta}{q}$ 	
00001	$\overset{\Delta}{q}$ 	
10001	$\overset{\Delta}{q}$ 	
100001	$\overset{\Delta}{q}$ 	
00010001	$\overset{\Delta}{q}$ 	
01000001	$\overset{\Delta}{q}$ 	

From Di

001	$\overset{\Delta}{q}$ 	
0001	$\overset{\Delta}{q}$ 	
10001	$\overset{\Delta}{q}$ 	

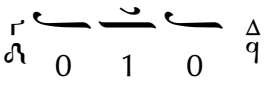
From Ke

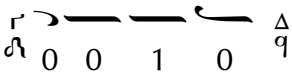
01000001	$\overset{x}{\lambda}$ 	
10001000001	$\overset{x}{\lambda}$ 	

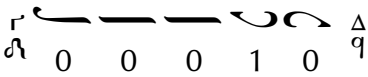
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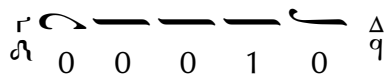
Accented on second to last syllable:

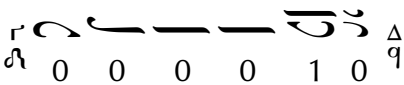
From Ga

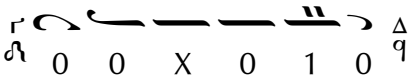
010 

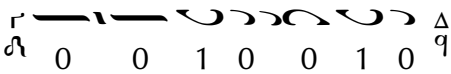
0010 

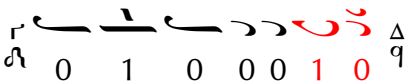
00010 



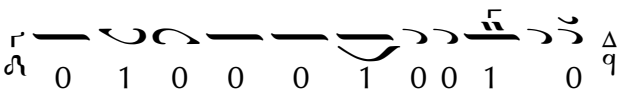
000010 

00X010 

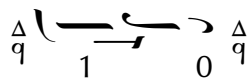
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0100010 

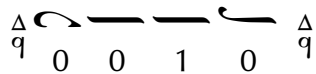


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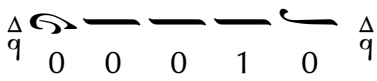
From Di

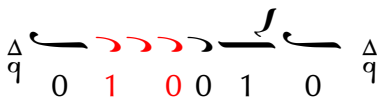
10 



0010 

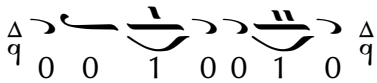
Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

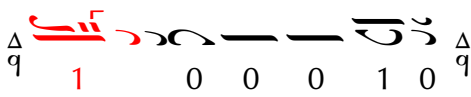
00010 

010010 

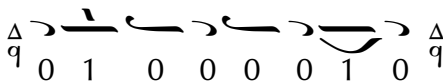


100010 

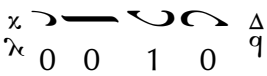
0010010 

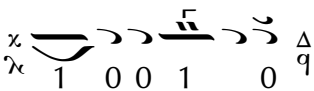
0100010 



01000010 

From Ke

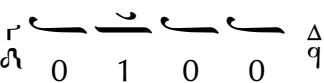
0010 


10010 

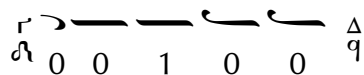
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Accented on third to last syllable:

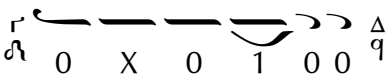
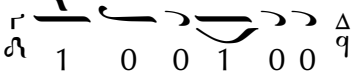



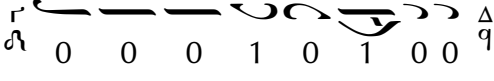


From Ga

0100 

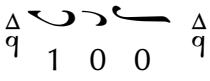
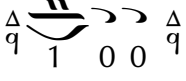
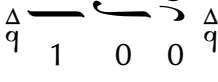


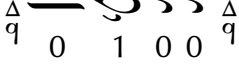
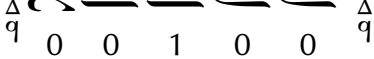
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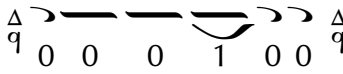
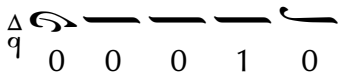


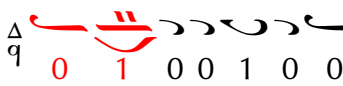
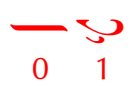
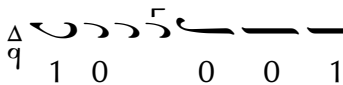
Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

0X0100		
100100		
0010100		
0100100		
00010100		
0100100100		



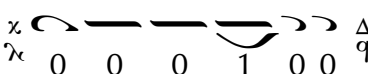
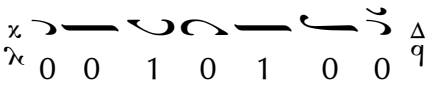


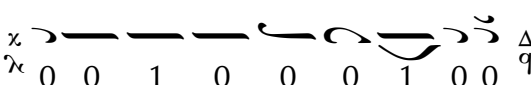
From Di

100	
	
	
0100	
	
	
00100	

Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

000100	$\overset{\Delta}{q}$ 	$\overset{\Delta}{q}$
000100	$\overset{\Delta}{q}$ 	$\overset{\Delta}{q}$
0100100	$\overset{\Delta}{q}$ 	
	$\overset{\Delta}{q}$ 	
1000100	$\overset{\Delta}{q}$ 	$\overset{\Delta}{q}$

From Ke

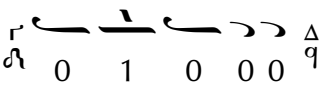
100	$\overset{x}{\lambda}$ 	$\overset{\Delta}{q}$
00100	$\overset{x}{\lambda}$ 	$\overset{\Delta}{q}$
000100	$\overset{x}{\lambda}$ 	$\overset{\Delta}{q}$
0010100	$\overset{x}{\lambda}$ 	$\overset{\Delta}{q}$
00100100	$\overset{x}{\lambda}$ 	
001000100	$\overset{x}{\lambda}$ 	$\overset{\Delta}{q}$

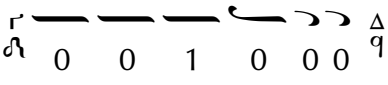
Accented on fourth to last syllable:

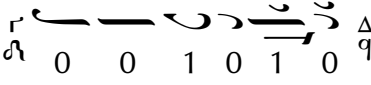
From Ga

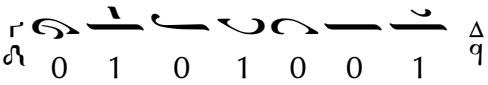
1001	$\overset{r}{d}$ 	
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Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

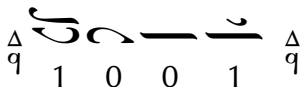
01000 

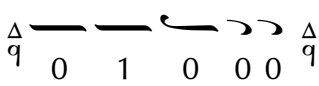
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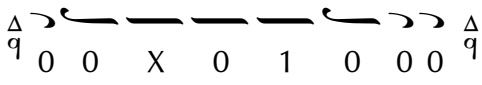
001010 

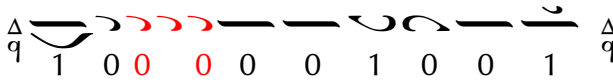

0101001 

From Di

1001 

01000 

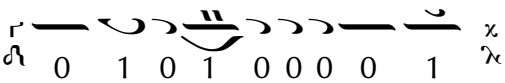
00X01000 


1000001001  

E) Medial Cadences on Ke

Accented on last syllable:

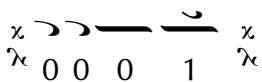
From Ga

010100001 

00010100001 

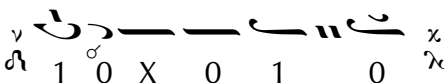
From Ke

00 

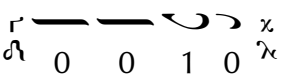
0001 

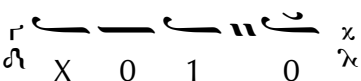
Accented on second to last syllable:

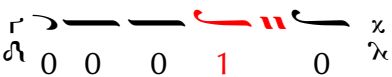
From Nee

10X010 

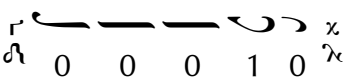
From Ga

0010 

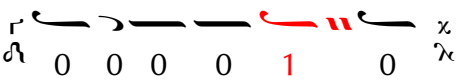

X010 

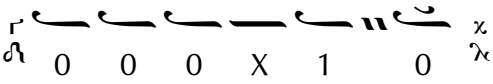
00010 

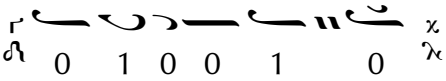

1




Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

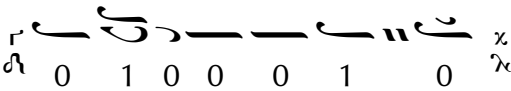
000010  

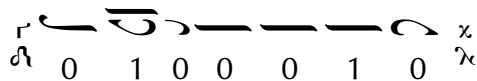
000X10 

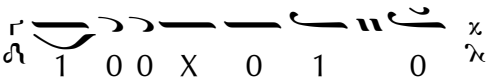
010010 

100010 

0010010 

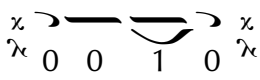
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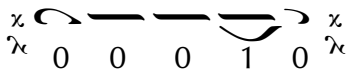



100X010 

From Ke

010 

0010 

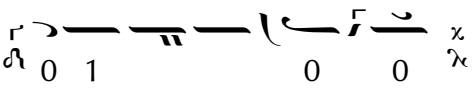
00010 

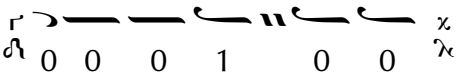
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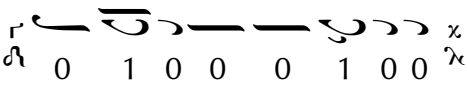
Accented on third to last syllable:

From Ga

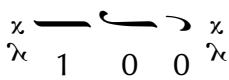
Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

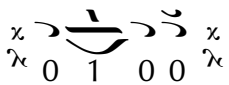
0100 

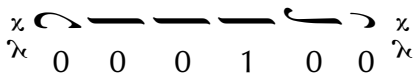
000100 

01000100 

From Ke

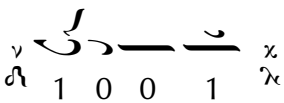
100 

0100 

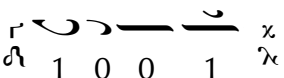
000100 

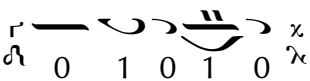
Accented on fourth to last syllable:

From Nee


1001 

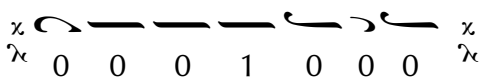
From Ga

1001 

01010 

From Ke

01010 

0001000 

Plagal Fourth Mode - Heirmologic (Triphonos) - Canons

F) Other Formulae

0001001 $\overset{\curvearrowright}{\delta} \quad \overset{\curvearrowright}{0} \quad \overset{\curvearrowright}{0} \quad \overset{\curvearrowright}{0} \quad \overset{\curvearrowright}{1} \quad \overset{\curvearrowright}{0} \quad \overset{\curvearrowright}{0} \quad \overset{\curvearrowright}{1} \quad \overset{\curvearrowright}{\delta}$