App Analysis!

CLEARTUNE MMM

Applications, or 'apps' as they are more commonly known, are enroaching on all aspects of our life, and early music is no exception. In each issue of Musica Antiqua, we will take a closer look at some of these. First up, is 'Cleartune' which is fast replacing the previously universal and expensive tuning machine options of the not too distant past.

Edward Dean

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With around half a million downloads since its release in 2008, the application Cleartune for Apple*/Android devices has taken the market for chromatic tuners by storm. Although its dual-function as pitch pipe proves to be nothing new, its accuracy (to 1/100th semitone) and price (£2.39) must have accounted for some of its success. Most significant of all, especially for early musicians, is its ability to tune temperaments: three 'Pythagorean/Just' temperaments; four 'Meantone'; eight 'Well Tempered'; six 'French'. These temperaments come as standard, but this list is clearly not exhaustive. While that may be true, what makes Cleartune so useful is that you can add your own. The only catch is: there are no guides on how to programme it... until now, that is!

Only twelve numbers are needed (in other words: one for each note of the chromatic scale) to set up any new temperament. Each of these numbers represents what is known as the cent offset, which is a measure of the difference between the note in the new temperament and the same note in equal temperament. This difference is measured in 'cents' (1 cent = 1/100 th)of a semitone).

> Starting with the next issue, our temperament series will explore some of early music's most significant temperaments: their invention, tonal characteristics, and how to tune them by ear or with Cleartune (cent offset figures included)

9:42 AM



http://www.bitcount.com/cleartune/











C-D-E Do-Re-Mi

Once you know how, programming temperaments could not be more simple. To aid you on your way, we have provided a step-by-step guide on how to get started:

Step 1:

Step 3:

After loading, select the 'i' icon at the bottom right of the page.





Step 2:

Default

Frequency display

From this, the options menu appears, and you can personalise your Cleartune: type your frequency of A 440/415/392 Hz]. (e.q. Choose a central key for your temperament by selecting Temperament Key.

Options Presets 440 A4 Calibration Notation Transposition Temperament Equal Temperament Needle Damping 0 | ||

ON

Select Temperament from the menu. This will enable you to select one of the preexisting temperaments or, alternatively, to add a new one.

Done Tempera
Equal Temperament
Equal Temperame
Strings
Stretch Tuned Guit
Violin Family
Pythagorean/Just
Pythagorean

Pythagorean Just Standard Just intor

Meantone

Step 4:

At the top right hand corner of the Temperament menu, select Edit and then the + icon that has appeared in the same place.

Cancel Ad	d Tempe
Temperame	nt Name
Cent Offset	
1 (C)	0.0
2 (C#)	0.0
3 (D)	0.0
4 (E♭)	0.0
5 (E)	0.0
6 (F)	0.0
7 (F#)	0.0

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nation	



Step 5:

Add the name of the 'new' temperament in the first box, and then each of the Cent Offset numbers in the boxes below

Cancel Edi	t Temperamen	t Save
Cent Offset		
1 (C)	6.0	
2 (C#)	0.0	
3 (D)	2.0	
4 (Fb)	4.0	
QWE	RTYU	ΙΟΡ
ASD	FGHJ	KL
	CVBN	M 💌
123	space	Done

Step 6:

By clicking Save at the top right hand corner of the page, your temperament has been added to Cleartune's temperament menu (it will appear under Custom)

