

# **Organic Art Knowledge Base**

**Summary:**    **Compatibility with non-Intel x86 CPU's.**

Article No:    02

Date:           14-Jul-96

Applies to:    1.x Demo, 1.x Retail

X-ref:          <none>

## ***Problem:***

Organic Art installer recommends using the 486 version on your non-Intel CPU, for instance the Cyrix 6x86. 486 optimised version runs faster than the Pentium optimised version.

## ***Explanation:***

There are two versions of the 3D renderer in Organic Art: one using integer maths (termed "486 optimised"), and one using floating-point maths (termed "Pentium optimised").

The floating-point renderer uses some low-level assembly language optimisations which rely on certain instruction timings on the Intel Pentium. These timings may differ on non-Intel x86 compatibles, making the code run considerably more slowly. The integer renderer makes fewer assumptions, and so is generally not affected by specific instruction timings.

## ***Solution:***

Use the 486 optimised version. On many systems, there is <5% difference between the two versions, so if the 486 version runs well on your system, your are getting 95%+ performance (at which point the performance of your motherboard and video card are going to matter more).

## ***Status:***

Organic Art currently uses Microsoft Rendermorphics' Reality Lab 2.0 as the 3D renderer. Future versions of Organic Art will be use Microsoft's Direct3D, which is the successor to RL2.0. Computer Artworks will, as always, endeavour to provide the most up-to-date hardware support available; however optimisation of non-Intel x86 CPU's in Direct3D lies with MS.