

# Magic ScreenSaver

(Version 1.02 - June 8/1990)

by Bill Stewart & Ian MacDonald  
Dynamic Information Systems - Calgary, Alberta

## *How Does Magic Work?*

When Magic starts up, it tries to retrieve the default control panel settings from the WIN.INI file. If it can't find them, it creates a new default set. Magic then installs a 'Journal Hook' (using Magic's DLL) to monitor the keyboard, mouse movements and mouse location. Then a timer is created to measure periods of inactivity, the mouse's duration in the 'Sleep Area', and the animation of the 'Nova Icon' (when active) .

Conditions for sleep:

- (1) No user activity for the specified timeout period (default is 5 minutes), OR
- (2) Mouse is inside the boundaries of the 'Sleep Area' with no mouse movement for approximately 1 second. The 1 second delay period is used to prevent Magic from going to sleep every time the mouse passes through the 'Sleep Area'. Note: If a mouse button is down within the 'Sleep Area', Sleep Mode will not be activated.

Control is given to Magic's graphic routines only when 'null' messages are detected in the system's message queue. Null messages are present only when all other applications are idle. This ensures that the performance of other, properly-written Windows applications will not be affected by Magic. In the event that other applications (running simultaneously) also use 'null' messages to control processing, each application gets its share of the 'null' messages.

The period of the timer is 1 second and was chosen such that it should not interfere with the system's operation.

The Journal Hook, Timer, and Null message processing can be temporarily suspended by turning off Magic's control panel 'Power Switch'. This removes any effects that Magic might have on system performance. Turning the 'Power Switch' back on reinstalls the Journal Hook, Timer, and Null message processing.

Note: Closing the control panel frees most of the memory required by Magic.

The password used by Magic is not encrypted. It is stored in the WIN.INI file under MAGIC as Password=[user selected password] . Our method will only prevent casual snooping. If anyone feels they require a more elaborate security system, let us know. We'll see what we can do for you.