Magic ScreenSaver
(Version 1.13 - Dec 1/1990)

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How Does Magic Work?

When Magic starts up, it tries to retreive 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 specifed 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 mesage processing.

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

Communications functions used in Windows do not report activity to the system when they are active. Magic's detection of comm activity relies on determining whether a comm port is open or not. If you use a communications program that leaves a port open when it's done, Magic will assume that the port is in use. Although this is not harmful, Magic will not animate its graphics as a result.

Also note that monitoring ports used by DOS communication programs will have no effect on the operation of Magic. This is because DOS apps will receive their share of processing time regardless of what a Windows app (Magic) is doing.