

M o r n i n g S t a r

DEMO/v0

December 11, 1991

"I am ... the bright Morning Star" (Rev 22:16, NIV)

Introduction

Morning Star is the second generation version of the popular DOS screen saver called VGAMoire. Morning Star includes many large advances in technology. VGAMoire was limited to drawing a Moire line design on VGA video cards. Morning Star can draw any of its designs on any video card it has a video driver for.

NOTE: If you have any difficulties with Morning Star, please be sure to read the "Features" section before contacting us.

Morning Star uses "saver modules," which are tiny programs that draw a design. Morning Star also has a randomizer which can switch between different modules at random. It requires EMS memory to operate.

This is the first DEMO version of Morning Star. Morning Star has been under intensive development for approximately eight months and has much to boast about. The demo version is crippled in two minor ways. First, the randomizer cannot be used. Second, it will not allow a saver module to run continuously for more than ten minutes. Nevertheless, the demo version is certainly sufficient for evaluation or even full-time use. If you try this demo version out, please send us your comments and suggestions!

The instructions in this file are minimal. Complete documentation will be included with the production release. Also included with the production release will be a kit for writing your own device-independent saver modules (in 80x86 assembly language, preferably with Turbo Assembler), source code for various sample modules, video drivers for 256 color and 16 color VGA modes, and roughly twelve finished saver modules.

Comments, More Information

All comments, suggestions, criticisms, etc. are welcome and requested! To speak your mind or request more information, write to:

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In particular, if you have problems or success using Morning Star with a network, please relate your bad/good news to me!

When giving bug or success reports, please indicate the kind of network and what version of the network software you are using, the version of Morning Star you are using (in this case DEMO/v0), the options you specified when installing Morning Star, and, if at all possible, your AUTOEXEC.BAT and CONFIG.SYS files. Also helpful are the DOS version your computer is using.

Installing Morning Star

For a list of valid options, type:
MORNSTAR ?

Morning Star will not install itself unless you specifically tell it to. To install it, use the /I option. Using the /I option alone will install Morning Star with the default settings or, if a MORNSTAR.INI configuration file exists, it will attempt to load custom settings from that file. To install it type:

MORNSTAR /I

Other options allow you to customize the behavior of Morning Star. See the "Features" section for more information on the available features.

Overview

Morning Star is mouse-aware, telecommunications-aware, disk-aware, and keyboard-aware. It waits until there has been no mouse activity, no telecommunications activity, no disk driver activity, and no keyboard activity for a specified amount of time, and then it will engage. When Morning Star engages, it first checks to see if it will be able to draw a design. If there is not enough free memory, or the screen is in an unrecognized video mode, or if there is a carrier signal present on your modem, then Morning Star will beep and will only blank the screen; it will not draw a design. When Morning Star blanks the screen, it allows DOS programs to continue processing in the background. This is ideal for telecommunications, because your connection is not broken, and you can prevent screen burn-in even

while transmitting large files.

If Morning Star determines that everything is in order, then it will load a saver module and run it. The saver module then draws a design until you move the mouse or press a key.

Features

Morning Star has features that no other DOS screen saver can compete with. We'd like to list just a few of its many features...

- draws many designs!
- high quality, very inexpensive! (\$15)
- pop-up configuration panel!
- uses less than 8k of conventional memory!
- uses EMS memory for data!
- can allow DOS programs to process in the background when the screen is blanked - ideal for telecommunications!
- optional password protection!
- fully restores the previous video mode (no other DOS screen saver does it as well)!
- mouse-aware!
- telecommunications-aware!
- disk-aware!
- flashes the border color when your phone rings (if you have a modem attached)!
- good service!
- shareware - try before you buy!

Morning Star has a number of command-line switches you can use to configure how it operates. If you do not like or do not understand how to use the DOS command-line, then see the "Configuration Panel" section, which explains how to use Morning Star's pop-up Configuration Panel to change its settings.

The table below lists Morning Star's command-line switches and their functions. Follow a switch with a minus sign to turn it off (eg, M- to turn off mouse awareness).

Switch	Function
?	displays a list of valid switches and Morning Star's current settings.
I	install Morning Star.
U	uninstall Morning Star.
Wn	wait for n minutes before engaging.
M	set mouse awareness.
V	set video awareness.
B	only allows screen blanking; no designs may be drawn (also allows DOS programs to continue processing while the screen is blanked).
P	activates password protection (password can be set using the Configuration Panel (see "Options" heading in the "Configuration Panel" section); the production release will include a utility to allow you to set the password without using the Configuration Panel, for users who do not have EMS memory).
T	tell current settings.
F	blanks screen by fading out to black; may draw designs after screen has faded out, depends on other settings and the current video mode.
Zn	set telecommunication awareness (watches activity on specified COM ports). use Z0 to clear the list of COM ports to watch. use Zn (n=1,2,3,4) to add COM port n to the list. eg: Z012 watches only COM1 and COM2. eg: Z13 adds COM1 and COM3 to the watch list. eg: Z2- removes COM2 from the watch list. eg: Z0 disables telecommunication-awareness. Note: If you have a serial input device (mouse, light pen, touch pad, etc), DO NOT tell Morning Star to watch the COM port which the input

device is attached to: the results will be unpredictable. Direct connections to mainframes or networks (line drivers) may confuse Morning Star, although some connections which have been tested work well.

- D disable Morning Star completely (provides Windows compatibility).
- E enable Morning Star after disabled with option D.
- disable timed screen blanking, still allows blanking by hotkey (can be nested for batch file usage).
- + enabled timed screen blanking after disabled with option -.
- S save current settings (can be nested up to 8 times for batch file usage).
- R restore saved settings.
- R- forget all saved settings.

Hotkeys

Key	Action
[ctrl]-[alt]-[<]	Turn Morning Star OFF. Morning Star will beep once to signal that it is off.
[ctrl]-[alt]-[>]	Turn Morning Star ON. Morning Star will beep twice to signal that it is on.
[ctrl]-[alt]-[/]	Pop up the Configuration Panel. Will beep to signal that it cannot if the screen is in text mode.
[leftshift]-[rightshift]	Blank the screen. Depending on Morning Star's settings, what the current video mode is, and how much EMS memory is available, Morning Star may or may not draw a design.

In the final production release of Morning Star, there will be a utility which lets you select your

own custom hotkeys for Morning Star.

The Configuration Panel

When you press [ctrl]-[alt]-[/] to pop up the Configuration Panel, Morning Star first checks to make sure the screen is in text mode. If it is not, or if the screen is in an unrecognized, nonstandard text mode (as on some SuperVGA cards), then it will beep and will not pop up the Configuration Panel.

The Configuration Panel will pop up in the middle of the screen on top of whatever else you are doing. If you have a mouse, you will see an arrow-shaped mouse pointer, with which you can click buttons (move the pointer onto the button and click the left mouse button). Pressing the right mouse button records any changes you have made and closes the Configuration Panel, removing it from the screen.

The "mouse cursor" is an arrow-shaped pointer. The "flashing cursor" is a short, flashing underline. When you press a key, it affects the control that the flashing cursor is on. When you press a mouse button, it affects the control that the mouse cursor is on.

Controls

A control is simply any button, checkbox, listbox, value box, edit box, etc.

A button looks a little bit like a button, and has a descriptive (maybe?) word on it. Clicking on a button activates the button, which may cause an action to occur (such as popping up a dialog box).

A checkbox is a tiny box which can have a checkmark in it. If there is a checkmark, then the checkbox is on. If it is empty, it is off. There is usually a piece of text next to it, which describes the function of that particular checkbox.

A value box has an arrow pointing left at its left end and an arrow pointing right at its right end. Between them, a value is displayed. Often this will be numerical, though it may be something else. For instance, it might read "Big" if there are three sizes, big, medium, and small. Clicking on the left arrow decreases the value (eg, "big" to "medium"). Clicking on the right arrow increases the value (eg, "small" to "medium").

An edit box holds a string, which can be edited. Use the keyboard to enter text.

A listbox holds a list of many items. The list can be scrolled upward or downward by clicking on the up and down arrows of the scrollbar on the right side of the listbox. To select an item in the listbox, simply click on it (or use the up and down arrow keys to highlight it).

Keys

Key	Action
[Tab]	move cursor to next control (button, listbox, checkbox, etc).

[BkTab]	move cursor to previous control.
[Space]	activate the button or checkbox that the flashing cursor is on.
right/left arrows	increase or decrease the value if the flashing cursor is on a value box.
up/down arrows	move the hilight bar up or down if the flashing cursor is on a listbox.
[Esc]	cancel the operation (close a dialog box or the Configuration Panel).

The Layout

The box in the upper left-hand corner is the credits box. If you click here, you will see the credits display.

The upper right-hand corner has three controls: the power switch, the "Options" button, and a button which says "Video". The power switch checkbox can be used to turn Morning Star off and on. Clicking on the "Options" button pops up a dialog box which lets you change certain settings. If you save them, they will be used as defaults whenever you install Morning Star. See the "Options" section (below) for more information.

The "Video" button will be discussed shortly. First, we have to explain about a couple things.

Below the credits box is a listbox which lists the available modules. A module may display extra controls (usually used to configure the module's design) in the box to the right of the module listbox.

The box on the bottom displays credits for the selected module. If you click here, you will see an information window for the selected module.

Video Drivers

Now we'll discuss the "Video" button. If you click here, the module listbox will change and will display the available video drivers. The "Video" button will also change and read "Modules". Simply hilight the video driver you want to use. Be sure to select the appropriate video driver for your video card! We cannot be responsible for any damage which occurs from using an incorrect video driver! Probably all that would happen is the display would be haywire until you turn the machine off and back on, but we cannot be responsible for any damage which may occur!

When you have selected the video driver you want to use, click on the "Modules" button to return to the module list.

Options

Clicking on the "Options" button presents you with a dialog box with several configuration settings. In the lower righthand corner are six buttons (Colors, Password, Load, Save, Ok, Cancel). The "Colors" button has not yet been implemented in this demo release. Clicking on "Password" lets you set or change the current password. "Load" loads settings from the settings file. "Save" writes the current settings into a special file, and whenever you install Morning Star, these settings are used as defaults (though they may be overridden with command-line switches. See the table in the "Features" section). Clicking "Ok" accepts your changes; clicking "Cancel" rejects your changes (you can make changes, save them, and then revert to the prior settings, but the saved settings will not revert).

In the "General" box, you can select the amount of time that the computer must be idle before blanking the screen. When the "Password checking" checkbox is checked, Morning Star will require the password to be entered before unblanking the screen.

The "System Activity" box lets you toggle video-awareness and mouse-awareness on and off.

Telecommunication awareness is controlled by the "COM Ports" box. You can check the COM ports you want Morning Star to watch for activity.

"Blanking Options" controls exactly how the screen is blanked. If "Blanking only" is checked, the screen will only be blanked and the design will never be drawn (this allows DOS programs to continue processing while the screen is blanked--this is ideal for telecommunications). "Hardware blanking" should be checked unless you have a true IBM VGA or an ATi VGA (some other VGAs may work; VGAs based on the Tseng Labs chipset require "Hardware blanking" to be checked). If "Fade to black" is checked, Morning Star will blank the screen by fading it out to black.

Uninstalling Morning Star

To uninstall Morning Star, use the command:

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MORNSTAR /U
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If any programs have been installed on top of Morning Star, it will complain and ask you if you're sure you want to (it could cause a system crash).

Not Implemented

The Options dialog box has a button labeled "Colors." Clicking on this button sounds a beep but does nothing else. Although configurable colors are already implemented, the dialog box for configuring them has not been coded yet.

Windows 3.0

Morning Star is not designed to work in conjunction with Microsoft Windows. You must disable Morning Star before starting Windows. To do this, use the /D option. An example of a batch file to use to start Windows:

MSWIN.BAT

@echo off

mornstar /s /d ; save settings, disable it

cd \win

win ; start Windows

mornstar /r ; restore settings