Messages to the Monitor Function

The message passed as a parameter to the monitor function can have any of the values defined by these constants:

```
initMsg         = 1;    initialization
okMsg           = 2;    user clicked OK button
cancelMsg       = 3;    user clicked Cancel button
hitMsg          = 4;    user clicked control in Options dialog box
nulMsg          = 5;    periodic event
updateMsg       = 6;    update event
activateMsg     = 7;    not used
deactivateMsg   = 8;    not used
keyEvtMsg       = 9;    keyboard event
superMsg        = 10;   show superuser controls
normalMsg       = 11;   show only normal controls
startupMsg      = 12;   code has been loaded
```

Constant **Meaning**

initMsg — Sent before the Options dialog box is displayed, after the Monitors control panel has located any resources (such as 'gama' resources) referred to by your monitor function. When you receive this message you should execute initialization code. You can use initialization code to set default values for controls and allocate memory for local storage, for example.

If you do allocate storage, be sure to pass a handle to the storage as the function result. The next time your extension is called, this value will be available in the *monitorValue* parameter.

This message is preceded by the startup message and followed by either the super message or the normal message.

okMsg — Indicates the user has clicked the OK button. The OK button is a standard control put in the Options dialog box by the Monitors control panel. You should not make any changes irreversible until you receive this message.

When the user clicks the OK button, the Monitors control panel hides the Options dialog box and calls your monitor function with this message. This is your last chance to check the values of dialog items that the user might have changed. You should release any private memory allocated by your extension file before returning control to the Monitors control panel.

cancelMsg — Indicates the user has clicked the Cancel button. The Cancel button is a standard control put in the Options dialog box by the Monitors control panel. Return the computer system to the condition it was in before the user clicked the Options button, release any private memory allocated by your extension file, and return control to the Monitors control panel.

hitMsg — Indicates the user has clicked an enabled control in the Options dialog box. The dialog-item-list number of the control is passed in the item parameter to the monitor function; see the preceding section for a discussion of this parameter.

nulMsg — Sent periodically to allow you to perform tasks that have to be done repeatedly, such as blinking an insertion point. Do not assume any particular timing for this message.

updateMsg — Sent on every update event.

activateMsg — Sent on every activate event for which the Options dialog box becomes active. Currently, this message is not used, because the Options dialog box is modal. However, you should handle this message as you would any activate event, because in future versions of the Operating System this dialog box might be modeless.

deactivateMsg — Sent on every activate event for which the Options dialog box becomes inactive. Currently, this message is not used, because the Options dialog box is modal. However, you should handle this message as you would any activate event because in future versions of the Operating System, this dialog box might be modeless.

keyEvtMsg — Sent on every keyboard event.

superMsg — Indicates the user is a superuser-that is, the user can be assumed to be very knowledgeable. This message is sent when the user holds down the Option key while clicking the Options button, and it could be sent by other mechanisms in the future. You should display any controls that you have reserved for such users.

This message or the normal message is sent immediately following the initialization message.

normalMsg — Indicates you should not display controls reserved for superusers.

This message or the super message is sent immediately following the initialization message.

startupMsg — Sent as soon as the code in your 'mntr' resource has been loaded, before the Monitors control panel finds any resources referred to by your monitor function. You can then load and modify any resources that must allow for the capabilities of the computer system or for superusers. You can use this opportunity, for example, to modify your 'DITL' resource to display special controls for superusers.

You can call the **Gestalt** function to determine the capabilities of the user's computer system, and you can check the value of the item parameter to determine whether the user is a superuser. If the user is a superuser, the Monitors control panel sets the item parameter to 1 when it sends the

startup message.

This message is the first message sent.