Program Name:	**CLIPMONO.EXE**
Version:	**3.0**

For Operating Systems: **Windows 3.1, Windows 4.0 (Chicago), Windows NT (3.1 through 3.5**)

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Price: **FREE**

Extra Equipment: **2nd monitor and monochrome adapter card.**

Purpose

ClipMono is a Windows utility designed to display Windows clipboard data on a 2nd monochrome monitor. So long as ClipMono is active, clipboard data is automatically displayed whenever a change is made to the monochrome data. Only text data is displayed; all other clipboard data is handled just as it would be if ClipMono was inactive.

In this fashion, one can refer to clipboard data by looking at the separate monochrome monitor, even when the clipboard data is not visible on the primary monitor.

Features

Here are some of ClipMono's interesting features:

• Mono display is ALWAYS current; no need to do anything special to view your data. Just copy the data into the clipboard using your favorite program, and then just read the results!

• Display is scrollable. Use arrow keys to scroll, or pop up a scroll bar, and use the mouse. Scrolling is extremely fast.

• Open and view text files directly from ClipMono's menu.

• "Drag and Drop" is supported. Just drag a text file onto ClipMono, and it will appear on your monitor.

• Settings are permanently stored in the system registry.

• The ability to transfer information FROM the monochrome monitor into your clipboard is supported.

<u>Usage</u>

There are two versions of ClipMono:

<u>Version one, for Windows 3.1 - 4.0, consists of this single file:</u>

CLIPMONO.EXE: Designed to run under WIN16 platforms such as Windows 3.1 and 4.0.

<u>Version two, for Windows NT, consists of these files:</u>

NTCLPMON.EXE: Designed to run under WIN32 platforms such as Windows NT.
MONODEV.SYS: A device driver used by NTCLPMON. Not used with CLIPMONO.EXE.

<u>Using **CLIPMONO.EXE** (for Windows 3.1 - 4.0):</u>

ClipMono is easy to use. Simply run the CLIPMONO.EXE program from an icon (or optionally place CLIPMONO.EXE in the startup folder for automatic startup).

As soon as you activate the program, whatever text happens to reside in the clipboard when you launch ClipMono will instantly appear in the monochrome monitor. (If there is no text in the clipboard, the monochrome display won't change).

From then on, whatever text you decide to copy to the clipboard will instantly appear on the 2nd monitor. (Ok, maybe not instantly! If you have a large amount of data, there may be a pause while ClipMono reformats the data).

<u>Using **NTCLPMON.EXE** (for Windows NT):</u>

NTCLPMON requires a device driver, **MONODEV.SYS**, to be present in the Windows NT system. To install MONODEV.SYS, follow these steps:

1) Under NT, start up an MSDOS session.
2) Switch to the directory containing the unarchived ClipMono files.
3) Type: **INSTALL**
4) If there were no errors, shutdown NT, and then restart.

(Note: If there were errors, make sure that your **SYSTEMROOT** environment variable points to your Windows NT root directory. I.e., C:\WINNT. Windows NT should automatically set this variable under normal circumstances).

MONODEV.SYS should now be installed into NT. To verify that the driver is really installed, you could open the control panel and look at the "devices" list. Keep the "startup" setting turned to "manual".

Now, try out NTCLPMON.EXE. Create an icon for the program, and click on it. If all goes well, a message will be displayed on the screen indicating that the MONODEV device has been started.

From this point forward, NTCLPMON should behave exactly like CLIPMONO.EXE does in Windows 3.1 - 4.0. By placing the icon for NTCLPMON in your Startup folder, the clipboard viewer will always be available to you.

ClipMono doesn't have a typical client area and horizontal menu, but instead utilizes a modified system menu. To activate ClipMono's system menu, left-click the ClipMono icon ONCE (the resident icon, not the program manager icon). The ClipMono menu will appear. (If you are using Windows 4.0 the system menu can be displayed my clicking ONCE with the right mouse button on the ClipMono task bar item).

ClipMono's personalized options are as follows:

- Settings
- Capture Mono Data
- Reposition Screen
- Clear Clipboard
- Refresh Screen
- Open File
- About

The **Settings** menu item pops up a dialog box to allow the following settings to be changed:

- **Wrap Long Lines**: Check this box if you want lines greater than the last column to wrap around to the next line. Leave the box unchecked if you wish to clip the lines at the rightmost boundary of the screen.

- **Tab Size**: This option changes the number of characters displayed between tab stops when the clipboard data has imbedded tab characters.

- **Double Click Setting:** When ClipMono is double-clicked, it normally pops-up the system menu. Using this setting, you can change the default behavior of a double-click. This same behavior occurs when you switch to ClipMono from another application, or press enter on the program's icon. (In Windows 4.0, the double click has been replaced by a single click on the status bar).

- **Defaults**: Hit this button to reset ClipMono's defaults for this dialog box.

Note that settings values are ALWAYS reflected in the system's registry (both Windows and NT) such that setting values are preserved between ClipMono sessions.

The **Capture Mono Data** menu item is a handy feature used to pull data from the monochrome monitor (perhaps displayed there by other applications, such another application written by this author) and transfer it to the clipboard, for use by other applications.

Notice that when data is captured from the monochrome monitor, attributes will be lost, since the text clipboard cannot store attributes. Therefore if you select this item at a time when the monochrome monitor contains highlighted (or otherwise attributed) text, you'll notice the following things occur:

1)   The monochrome text will be transferred to the clipboard. You may paste this data into other applications.

2)   Since ClipMono always displays what's in the clipboard, any highlighting on the monochrome screen will disappear; all characters will have the same attributes.

3)   Because of the line-wrap algorithm used by ClipMono, if the **Wrap Long Lines** setting is set to on, the screen may look funny. Therefore, when using this function, try turning **Wrap Long Lines** off.

Use **Reposition Screen** to change your view of the clipboard on the monochrome monitor. (You can only select this item if there are more than 25 lines in the clipboard). The **Reposition Screen** menu item will pop up a scroll bar for this purpose. (Optionally, you can use the PgUp, PgDn, Home, End, and arrow keys

instead of the scroll bar. This is a standard feature of windows scroll bars.) Note: You do NOT have to be in the **Reposition Screen** dialog box to use the scroll keys. They can be activated directly from the main icon (but the system menu must be closed for this to work).

The **Clear Clipboard** option will clear BOTH the monochrome display and the actual clipboard data itself. This option effectively destroys the clipboard and releases any memory associated with it.

The **Open File** option will open and display a text file on the monochrome screen (as well as transfer the file to the clipboard). This is a quick way of getting a text file to the clipboard. An even quicker way to do this is to use the drag and drop feature of the Windows File Manager, or the Windows 4.0 desktop or Explorer. Simply drag the files you want to display from the filer program directly onto ClipMono's icon.

The **Refresh Screen** and **About** menu items are pretty straight forward. Use the refresh item if some other program mucks up the monochrome screen. (Refresh will not appear to do anything if there is no data in the clipboard, or if the monochrome screen is already displaying the correct clipboard data).

Miscellaneous Information

The memory requirements vary depending on the size of the clipboard data. Due to time constraints, no effort was made to optimize the memory required to store clipboard data. Basically, clipboard data is stored in a fashion so as to be updated quickly on demand (i.e., using the **Reposition** menu item). However, large clipboard documents may require an even larger amount of memory. If you have virtual memory enabled, windows can dump this memory to disk if it needs to.   But the quickest way to free the memory is to just clear the clipboard.

ClipMono always displays the approximate amount of memory it's using to store the monochrome image. The size is displayed underneath the program's icon. It is reported in Kbytes, or bytes / 1024.

Enjoy the program!

Revision History

Version 1.0:   Original release
Version 1.1:   Maintenance release. Fixes inability to handle clipboard data with lines which terminate
                  with a single newline character. ClipMono could crash in this case.
Version 1.2:   Clipboards of certain sizes would cause ClipMono to crash. Fixed.
Version 2.0:   Support for Windows NT added. MONODEV.SYS added.
Version 2.2:   Added ability to transfer monochrome screen to clipboard. Placed **Tab Size** menu item
                  into new **Settings** dialog box. Added new "Wrap Long Lines" checkbox to Settings
                  dialog box. ClipMono now defaults to NOT wrapping lines. Also added the ability to
                  preserve system settings via the registry (compatible with Windows 3.1 and NT).
Version 3.0:   Added text file display support and "drag and drop". Added the ability to scroll the
                  screen directly from the main icon without the need of invoking the **Reposition** dialog
                  box. Added new support for choosing the behavior of a "double click". Fixed bug in the
                  reformatting code. Added a new INSTALL.BAT installation program for NT.

Known Bugs:

In Windows 4.0, if you use the default setting of "Invoke system menu upon double click", from the Settings box, the setting will not work as documented. I have not found a technical way to get this to work, since the task bar "owns" the system menu, and I do not have the correct SDK which I need to communicate with the task bar. Use the right mouse button to envoke the system menu.