

Macro Edit (EdMac)

Character Set/Screen Editor
by John Oakley

Loading and Using Macro Edit (EdMac)

The format for loading Macro Edit is as follows:

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EDMAC [file1 file2 file3]

file1 is a binary screen file

file2 is a binary set file

file3 is a binary macro file
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The 3 files are optional, if you are working on an extended project then you can boot into the files you are working on, perhaps from an execute file. The files must be in the order given. Say you are working on a character set but not a screen file and you want to boot into the set file. In this case you would specify any valid device other that D: for file1, ex. (EDMAC E: D:CHAR.SET).

The Edit Cursor can be controlled by either a Joystick, Koala Pad, or an Atari Touch Tablet. To select which input device you are going to use just put that controller in any port and:

<u>Joystick</u> - Press the Trigger <u>Koala Pad</u> - Press either button while the stylus is on the pad. <u>Atari Touch Tablet</u> - Press the stylus button while the stylus is on the pad.

You may alternate back and forth between a Joystick and either a Koala pad or an Atari Touch Tablet as much as you want, whenever you want. The only restriction is that once an Atari Touch Tablet has been selected the program will not work correctly with a Koala Pad. In using Macro Edit I usually use a joystick for drawing lines and go to my Koala Pad when I need quicker access to various parts of the screen.

When entering a filename for a Load or Save operation, the previous filename will appear and you can use this name by either pressing the button or hitting Return. You can exit the filename entering routine by hitting either the ESC or Break keys. You can get back to the DOS XL command processor by selecting DOS or by System Reset. Once you are back into DOS XL you can perform any intrinsic commands and still get back to Macro Edit merely by typing RUN.

Even though Macro Edit was meant to be used with DOS XL it will work with either Atari DOS 2.0s or DOS 2.5. When using without DOS XL though you can not specify files to boot into as you can with DOS XL. Also if you are going to exit back to DOS then you should have a MEM.SAV file if you wish to get back into Macro Edit. If you do want to get back into Macro Edit you can do so by selecting Menu Option M, the restart address is \$462E.

Macro Edit will work as an AUTORUN.SYS file under one of these environments also.

Character Set/Screen Editor

The Display Screen

The screen is divided into three sections. The top third will contain either the Character Set Editor display or the Screen Editor display. The Middle section is subdivided into two parts, the Character Set display and two command lines.

The Character Set can be either the standard ATARI set or the set that you are currently editing. The command lines contain the commands for selecting between using the Character Set Editor or the Screen Editor, bringing the various Menus on screen, as well as other options. The lower section will contain one of the four pull-up Menus.

Commands

<u>Mode</u> - The modes supported are Antic 4, GTIA 9, GTIA 10, GTIA 11, and Graphics 0. The Screen Editor display and Character set will be displayed in this mode.

<u>Inverse</u> - Toggles the Character Set between Normal and Inverse video. Characters picked up for placement on the Edit Screen display, or Editing will be displayed in either Normal or Inverse video.

<u>Toggle</u> - Toggles the Character Set between the Standard ATARI set in Graphics 0, and the User Character Set in the selected mode.

<u>DOS</u> - Exit program to DOS. If you are operating under DOS XL and you haven't used an extrinsic command then you can return to the point you left off with the command 'RUN'.

<u>Set</u> - Pull-up the Character Set Editor Menu and runs the Character Set Editor.

<u>Screen</u> - Pull-up the Screen Editor Menu and runs the Screen Editor.

<u>Color</u> - Pull-up the Color Menu. Allows changing the Hue and the Luminance of all Nine color registers.

<u>I/O</u> - Pull-up the Disk Menu. Allows for the loading and saving of Sets, Screens, and Macro files.

Menu Commands

Character Set Editor Menu

<u>Plot</u> - Toggles between Plot and Draw, indicates whether the pixels will be plotted or drawn on the Character Set Editor display.

<u>Copy</u> - First select 'from' character then select the 'to' character. Copy remains active until the first button press with cursor located outside of the displayed Character Set.

<u>Grid</u> - Toggles the Grid, used to indicate the pixel positions within the character, on and off.

<u>Invert</u> - Inverts the currently selected character.

<u>Mirror</u> - Mirrors the selected character. Only one of the three character displays will be correctly Mirrored, depending on the current mode.

Restore - Restores a character to what it was when it was selected.

Clear - Clears the selected character.

<u>Shift</u> - Shift In (with an up shift the character will shift up one line with the top line coming back 'In' the character on the bottom.) Shift Out (with an up shift the character will shift up one line with the top line going 'out' to a one byte holding buffer. The previous contents of the buffer will reenter on the bottom of the character.)

<u>Up</u> - Shift the character up one line.

Down - Shift the character down one line.

<u>Left</u> - Shift the character left. This command shifts one pixel position, since the three displays have different pixel widths, only one will be shifted left correctly. This only applies if you are in 'Shift In'. Shift Out will correctly shift the Graphics 0 display regardless of the mode you are currently in.

<u>Right</u> - Shift the character right. The same conditions apply as for Left.(See Above)

Rotate - Rotate the character 90 degrees within the Graphics 0 display.

Screen Editor Menu

<u>Plot</u> - Toggles between plot and draw mode, determines how the selected character or macro will be placed on the screen.

<u>Merge</u> - When Merge is turned off, displayed in normal video, and a Macro is placed on the screen. The full macro will be written, including blank spaces. When Merge is turned off, displayed in inverse video, the blank spaces of the macro will not be written. The Macro will be 'merged' into the background.

<u>Macro</u> - Can be toggled between 'Macro', 'Build', and 'Define'. When in 'Macro' you can select the macro that you will be plotting or drawing with. 'Build' lets you build the macros that you will be using. 'Define' allows you to create up to 24 macros on the Macro Screen.

<u>View</u> - Changes the entire screen to your Edit Screen. Allows you to 'view' your screen, you can scroll the display to see your entire screen.

<u>Up</u> - Scrolls the Edit screen contents up.

Down - Scrolls the Edit screen contents down.

Left - Scrolls the Edit screen contents left.

Right - Scrolls the Edit screen contents right.

<u>Home</u> - If the display window is not over Home (upper left) portion of your Edit Screen Then it will return Home. If the window is already Home then it will scroll to the lower left of the Edit Screen. If the display is scrolling then the scrolling will be stopped.

Vert - Allows you to set the vertical dimension of your Edit Screen. Range 24-128.

<u>Horz</u> - Allows you to set the horizontal dimension of your Edit Screen. Range 40-127.

I/O Menu

Load - Loads either a Screen, Set, or Macro file into memory. Will only load a binary file that was saved from this menu.

Save - Saves a Screen, Set, or Macro file to any device.

Binary - Selects the format for the Save file. Options are

Binary: The file will be saved as a binary file that can be loaded with the 'Load' command.

Data: The file will be saved as DATA statements for use in a Basic program.

.Byte: The file will be saved as .Byte statements for use in an Assembly language program.

Array: The file will be saved as a Char Array Definition, for use in ACTION! language programs.

<u>Dec.</u> - Selects the either Decimal (Dec.) or Hexadecimal (Hex.) for files that are saved with either the Data, .Byte, or Array formats.

<u>Convert</u> - Applies only to the loading and saving of Screen files. When Convert is turned off (normal video), then you are saving or loading screen data directly. When Convert is turned on (inverse video), then the Screen data is converted to ATASCII for saving, and ATASCII data is converted to Screen data for loading.

<u>Screen</u> - This is where you select where the file will go (load) or come from (save), also selects which area of memory will be cleared on the Clear command (below). Options are Screen, Set, and Macro.

<u>Clear</u> - Clears either the Screen, Set, or Macro memory. When selected Clear changes to inverse video and sounds a low Beep from the speaker. You have approximately 2 seconds to select Clear again or else the clear function will abort. This is to prevent accidental clearing of memory.

Start - Lets you select the starting line number for Saves using either the Data or .Byte formats.

<u>Incr.</u> - Lets you select the increment between line numbers for Saves using either the DATA or .BYTE formats.

#/Line - Lets you select the number of bytes that will be saved on each line for the DATA, .BYTE, or Array formats.

Using the Macro Function

There are three options controlling the function of the Macro Grid on the Screen Menu. These are 'Macro', 'Build', and 'Define'.

Macro:

When you are in the Macro mode, pressing the button while the Edit cursor is within the Macro Grid will place the Character Selection cursor at that point. Now any subsequent plot or draw operations on the Edit Screen will be done with that Macro instead of a single character.

When placing a Macro on the Edit Screen the Macro will have the same relative position to the Edit cursor as it has to the Character Selection cursor within the Macro Grid on the Screen Menu.

There is one option that affects the placement of Macros on the Edit Screen. That is 'MERGE', when merge is turned off (normal video), then the Macro will overwrite the Edit Screen. When merge is turned on (inverse video), then the blanks within the Macro will not be placed on the Edit Screen. This will leave the background undisturbed, in effect the Macro will be merged into the background.

Build:

Macros can be built in two different ways. The most direct way is to select characters from the Character Set and place them within the Macro you are building (plotted or drawn). The second way is to build your object on the display screen. This allows you to see how the object will be in the Graphics mode you are currently working in. Then when the object is completed, while still in 'Macro', select the Macro that you wish to build. Then toggle to 'Build', now plotting or drawing on the Edit Screen will transfer screen data to the Macro instead of the other way.

Going back to 'Macro' will allow you to use that Macro in other places on the Edit Screen now.

Define:

Selecting 'Define' allows you to define up to 24 Macros, of the sizes you wish, within the Macro Grid. The first time you press the button within the Macro Grid after selecting 'Define' the Macro Grid will be cleared. You will now be plotting or drawing onto the Macro Grid.

In plot mode the lines will appear when you let go of the button and cannot be changed. In draw mode you can move the lines around as long as you keep the button pressed. When you are done defining the Macros then just toggling from 'Define' to 'Macro' will save these macro definitions.

Scrolling to another Menu before toggling to 'Macro' will restore the Macro Grid to what is was when you next select the Screen Menu.

Conclusion

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If you have any questions then you can write me or leave me a message on Peach State BBS (912) 436-5115. Evenings and weekends.

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