

DRAW7 GENERAL INFORMATION

DRAW7 is a unique graphics drawing program containing many useful features not found in other drawing programs, particularly for manipulation screen images. It has been modeled and developed by David Beifeld after a program by Steven Chanin in the November 1983 issue of Softside Magazine. DRAW7 also incorporates a modified version of Charles Brannon's TextPlot subroutine for adding fixed sized upper and lower case text including 3-D and inverse type characters in different colors.

The DRAW7 program is basically designed to draw screen pictures with a joystick in two modes, Graph mode and Zoom mode. Graph mode uses the equivalence of Graphics 7 1/2 (Antic mode 14) to draw full screen pictures. Zoom mode uses Graphics 3 as a full screen window to "zoom" in to a selected portion of a Graph mode picture for detail display and modification. Both modes support powerful screen manipulation controls and four screen colors in a variety of hues. A Text mode is also available for entering text on Graph or Zoom mode screens.

DRAW7 Graph mode files are directly compatible with Micropaint and (uncompressed) Miro Illustrator (e.g. Koala and Atari) software. Separate utilities are included for converting compressed (and uncompressed) Micro Illustrator files. The utilities preserve screen colors as does the direct transfer of files between DRAW7 and Micropaint.

The source code for DRAW7 is written in BASIC and supported by several assembly language subroutines. The program requires 48K of memory, a disk drive and a joystick. It will run on all 6502 Atari models. Optional equipment would be a second disk drive and a printer for printing screen images. The print routine in DRAW7 is for a direct screen dump to a C. Itoh Prowriter. Because of file compatibility with other drawing programs, there are a variety of screen file print utilities available commercially and in the public domain for printing saved DRAW7 files.

Joystick, keyboard and console keys are used to call on DRAW7 features and capabilities. Refer to the initial DRAW7 menu for a list of DRAW7 commands. Interesting and exceptional results can be obtained by experimenting with various combinations of these commands.

An overview of DRAW7 features and capabilities follows:

- Draw and move cursor with a joystick.
- Plot and draw lines.
- Draw rectangle or blank out last rectangle drawn.
- Draw circle or disk or blank out last circle or disk drawn.
- Draw dotted and wide lines.
- Draw in Graph and Zoom modes.
- Use special cursor manipulation keys.
- Save and load Graph and Zoom mode screen files.
- Display disk directories and select file names for saving and loading.
- Replicate chosen Zoom mode screen throughout Graph mode screen.
- Change, rotate and remember screen colors.
- Add text to Graph and Zoom mode screens.
- Print displayed Graph or Zoom mode screen (using Prowriter).

- Shift displayed screen left or right, up or down.
- Horizontally or vertically mirror, duplicate or reverse chosen half of displayed screen image.
- Mirror or duplicate chosen quarter of displayed screen image.
- Flip screen over top to bottom or right to left.
- Draw lines in inverse color of displayed screen colors.
- Inverse all screen colors in chosen rectangular area.
- Reverse or continue effect of drawing inverse rectangular screen area.
- Blank with color chosen rectangular area (or window).
- Repeat last blank with color, in effect erasing a chosen window area that was blanked and drawn in.
- Erase selected color from screen.
- Ability to move saved Zoom mode screens into different areas of one or more Graph mode screens.
- Permits viewing of Graph mode screens in Atari graphic modes 9, 10 and 11. This function also allows the changing of background colors while viewing in these Atari modes.
- Dot and cross-hair cursors are available.
- Overlay screen with saved picture file while allowing current draw color to be predominate.
- Plus other features.

The DRAW7 disk contains the following program and data files:

AUTORUN.SYS - Automatically runs BASIC DRAW7 Menu program below.

DRAW7.MNU - Menu program to load and execute compiled version of DRAW7 or display or print (any printer) selected DRAW7 documentation.

DRAW7.ABC - Compiled version of DRAW7.

DRAW7.BAS - BASIC source code for DRAW7.

DRAW7.CMD - List of DRAW7 commands and functions (called by DRAW7.MNU).

DRAW7.GEN - General information on DRAW7 (called by DRAW7.MNU).

DRAW7.ML - Machine language subroutine used to initialize DRAW7.

DRAWP.ML - Printer subroutine of DRAW7.

DRAWT.ML - Text display subroutine of DRAW7.

KOALA2MP - Converts Koala or Micro Illustrator screen file (by Bruce Frumker in Creative Computing Magazine 6/84).

MP2KOALA - Converts Micropaint (or DRAW7) file to non-compressed Koala or Micro Illustrator file (by Bruce Frumker in Creative Computing Magazine 6/84).

PIC.7 - Pre-allocated DRAW7 default screen file for Graph mode (Graphics 7 1/2).

Comes with Moire pattern that displays five colors.

PIC.3 - Pre-allocated DRAW7 default screen file for Zoom mode (Graphics 3 screen).

SMEN - Sorted disk directory program offering various file options (called by DRAW7.MNU).

During program execution, if the DRAW7 disk is to be replaced with another to separately save screen files, first add the DRAW7T.ML and DRAW7P.ML modules to the receiving disk using Atari DOS with the "O" copy option. This will allow the text and print screen commands to be available (if desired) while the DRAW7 disk is not on-line. The alternative is to keep the DRAW7 disk in drive 1 and to save and load screen files from drive 2 (if available).

Certain common drawing functions have been left out of DRAW7 to permit compilation with the ABC Compiler and to allow room for the many unique features of this program. The functions that are missing, if needed, can be performed by compatible drawing programs through the transfer of screen image files.

Common missing functions of DRAW7 include the following:

- Area fill with patterns.
- Dependable area fill with solid color (DRAW7's is weak).
- Rubber band type drawings.

DRAW7's BASIC source code is included on this disk for those who may be interested. The code is condensed and sparsely commented for compactness. Comments and questions can be directed to the following:

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End of DRAW7 General Information.