Grid Mode is defined as the mode where the visual display is a grid filled with symbols. These are the menus available when the image is shown in the Grid.

FILE MENU (<ATL>F)
 The file menu has all the options for file input and output. From here you can select the image to load, save the current image, get information about an image, change the DMC file to use, and change the configuration of the program, either permanently or temporarily and exit from the program.

EDIT MENU (<ALT>E)
The edit menu contains options for changing both the image and thepresentation of the image. Many of these options are only available when there are symbols in the grid. If the menu item is gray, then itis currently not available,

FONTS & COLORS MENU (<ALT>F)
This menu contains various options for manipulating the colors andthe fonts.

VIEW (<ALT>V)
This menu allows you to either view the image as a graphical image, or view a list of all the symbols in the image.

INFORMATION MENU (<ALT>I)
The information menu presents the information for the current image, including the size in stitches and inches and the current evenweave count.

LIBRARY (<ALT>L)
The library function allows you to incorporate other PCX images into the current image. A library element is defined as any PCX file located in the directory defined as the library.

CURRENT SYMBOL (<ALT>C)
The current symbol is the symbol that will be added to theimage and is visible to the right of this option.

FILE MENU (<ALT>F)

LOAD FILE - This option will present a file window, listing either the PCX or CCS file located in the current working directory.   After selecting a file, it will be loaded into PCX2CCS.

INFORMATION   - This option will present a file window, listing either the PCX or CCS file located in the current working directory. After selecting a file, the height and width of the image will be presented. At this point you can select to LOAD the image, or DON'T LOAD. This option can be helpful in determining if the selected image is too big to load into PCX2CCS.

SAVE - This option will save the current image to the same named file as it was loaded from. If changes have been made the should be saved in a .CCS file, you will be prompted to save the image as a CCS file.

SAVE AS   - This option will allow you to change the name of the ffile to which the current image is being saved. This option is useful for creating multiple variations of the image. The default names is the same name as the loaded file, but as a .CCS file.

SELECT DMC FILE   - This option will present a list of .DMC file in the current working directory. Select the file to use for the loaded image. The file will be read immediately and the DMC information will be assigned to the current image.   Non-registered users only have 1 .dmc file, the master.dmc supplied with the program. Registered users receive a program RGB2DMC that lets them create their own .dmc files.

DEFAULTS - This option allows you to change any or all of the program defaults. The defaults are defined as the setting the program uses each time you run it.   This information can be saved and will then be the default configuration, or it can set for just the current session.

RESTORE ORIGINAL IMAGE - This option will re-load the image from the file.

PRINT ENTIRE CHART - This option will print the entire chart.

SELECT SECTION TO PRINT - This option lets you select an area of the chart to print. The selection cursor is the area selection cursor. The area to be printed will be inversely highlighted. After selecting an area to print, select PRINT SECTION from the FILE MENU.

PRINT SECTION - This option is available only after a section of the image has been selected for printing.

PRINTER SETUP - This option lets you configure your printer for the current PCX2CCS session.

EXIT - This option will terminate the program. If you have made any changes to the image, you will be prompted to either save the image, not save the image or cancel the exit.

GRID MODE EDIT MENU (<ALT>E)

MASS SYMBOL UPDATE - This option performs deletion, addition and replacement of all occurrences of specified symbols.

CLEAR/RESET GRID - This option will delete any symbols in the grid, reset the color palette to the default, and reset the grid size to the default maximum height and width.

CHANGE EDGES... - This option lets you clip the image size. You can move any/all of the edges of the image to a new location. Any symbols beyond the new position will be deleted.

ADD BLANK ROWS/COL TO EDGE... - This option lets you add any number of blank rows and/or columns around the edge of the image.

INSERT BLANK ROWS/COLS... - This option allows you to insert anynumber of   blank rows or columns into the image.

SELECT ROWS... This option allows you to select rows upon which toperform subsequent operations. When this option has been selected, the cursor changes to a sideways double ended arrow. Position the cursor at a row and depress the left mouse button. Keeping he button depressed, move the cursor. As the cursor passes over rows, they Will be inverse highlighted, indicating that they will be considered selected". If you should release the mouse button prior to finishing the selection, hold down the SHIFT key and then depress the left mouse button. The select box will be extended to the current cursor position. To cancel the selection, after releasing the mouse button, hit ESC.

SELECT COLS... This option is identical to SELECT ROWS, except that the cursor is now an up and down double ended arrow, and the selection process involves COLUMNS.

NOTE: The selection of rows or columns selects the ENTIRE row or column. It does not matter whether or not you can SEE the entire rows or column, it is considered selected.

CUT - This option is available only if rows or columns have been selected. Cutting will copy the selected row or columns to the clipboard. There are 2 suboptions: **CUT & CLEAR** which will remove the symbols in the selected rows or columns. **CUT & DELETE** will physically delete the selected rows or columns, reducing the size of the image.

CLEAR - This option will delete the symbols in the selected rows or columns, but leave the size of the image unchanged.

COPY - This option will copy the selected rows or columns into the clipboard for subsequent pasting.

PASTE - This option is available only when there are rows or columns in the clipboard. It has 3 sub-options, Insert, Overlay Opaque and Overlay Transparent.   Insert will shift the rows or columns to make room for the rows or columns in the clipboard. Opaque will replace every square in the original image with a square a from the clipboard. Transparent will replace only those squares that have a symbol in the clipboard. Empty squares will NOT be pasted into the image. See PASTE Menu Bar for   details

SELECT RECTANGULAR AREA - This option let you select a section of the image to manipulated. The cursor changes to a 4-way arrow, indicating that you can select rows and columns. Hold down the left mouse button and move the cursor. Any square that the cursor passes over is considered selected. and will be inversely highlighted.   If you should release

the mouse button prior to finishing the selection, hold down the SHIFT key and then depress the left mouse button. The select box will be extended to the current cursor position. To cancel the selection, after releasing the mouse button, hit ESC.

NOTE: There is no CUT or DELETE option when dealing with rectangular areas.

COPY - This option allows you to copy the selected squares into the Windows clipboard.

CLEAR - This option will clear the selected squares.

PASTE - This option is available only when there is a rectangular area in the clipboard. It has 2 sub-options, Overlay Opaque and Overlay Transparent.   Opaque will replace every square in the original image with a square from the clipboard.   Transparent will replace those squares that have a symbol in the clipboard. See PASTE Menu Bar for details

BITMAP - This option is active only if there is a bitmap in the clipboard.   There are 2 sub-options, Overlay Opaque and Overlay TraNsparent.   Opaque will replace every square in the original image with a square from the clipboard.   Transparent will replace those squares that have a symbol in the clipboard. See PASTE Menu Bar for details

   If the grid is empty, the color palette for the bitmap will be copied and used. If there is an image loaded, the color palette for the loaded image will be used, BUT the bitmap colors will be mapped a close as possible. Most of the time, the will be little noticeable color changes. I say "mostly" because, for example, if the loaded color palette is primarily GREEN and the bitmap is primarily RED, then you WILL notice the color changes.

SCALE - This option allows the image to be scaled up or down, in or out.   You can increase or decrease the height and/or the width. There are 2 SCALING OPTIONS, Windows and Chris's.

REDUCE NUMBER OF SYMBOLS - This option lets you select the maximum number of symbols (128, 64, 32, 16 or 8) and the algorithm to be used. The existing color palette and the individual pixels in the image are used to determine the most frequently used colors. These colors will become the new color palette. Each individual pixel in the image is then examined to determine which color in the new palette is closest (mathematically) to the original color. The numerical difference is then distributed among the neighboring pixels. How this difference is distributed depends on the algorithm.

GRID FONTS & COLORS MENU (<ALT>F)

CHANGE FONT - This option will present you with a window to select a new font to use a the symbols. You can select any True Type (TT) font that you might have installed, along with any "standard" font. You can change the size of the font. You can bold, italic or underline the font.

CHANGE COLOR PALETTE - This option will present you with a window displaying the current color palette. Since there are always 256 different symbols available, you will be shown 256 colored boxes. The window displays 20 boxes at a time. Each box is numbered 1-256 to indicate the relative position in the color palette. To change a color select a colored square, the next window has 3 scroll bars which can be manipulated to adjust the color.

CHANGE CURRENT SYMBOL COLOR -   This option will present a window containing 3 scroll bars and a colored square. The square is the color of the current symbol. The scroll bars represent the Red, Green and Blue values for this color. To change the color, select   of the scroll bars and move the thumb. As you adjust the scroll bar, the color will change. When you have the desired color, select OK to save the color. At any time, select CANCEL (or ESC) to NOT change the color.

TOGGLE COLOR/B&W SYMBOLS - This option will toggle between displaying ALL the symbols a black and displaying the colored symbols, Handy to use to see the white colored symbols.

TOGGLE BACKGROUND SYMBOLS - This option will toggle the background symbol on and off. When an image is loaded, this is automatically set to ON. A check mark will appear beside the menu item if the option is ON.

VIEW (<ALT>V)

View image - This option will put you in PCX viewer mode. The image   will be displayed as a standard graphics viewer, but with a box showing the section of the image that was visible in grid mode.   The box can be moved by positioning the cursor arrow in the box, depressing the left mouse button and moving the mouse. The box will follow the cursor arrow. <u>VIEWER MODE</u>

View Symbols - This will present you with a scrollable list of all the symbols currently used in the image, and the DMC color number and color name assigned to the symbol. This color number and name can be changed by selecting a symbol. The DMC information will appear in 2 appropriately labeled files. You can select either field and change, edit or erase the information.

LIBRARY (<ALT>L)

EDIT LIBRARY ELEMENT - This option allows you to load a PCX image from the library directory and edit it. The library directory can be changed to any directory. The default directory is /LIB under the directory where PCX2CCS is running from.

SAVE LIBRARY ELEMENT & SAVE AS LIBRARY ELEMENT - These options allow you to save the current image into the library directory for later incorporation.

 INCORPORATE LIBRARY ELEMENT - This option has 2   suboptions, Opaque and Transparent.   Opaque will replace every square in the original image with a square from the library element.   Transparent will replace those squares that have a symbol in the library element. The standard file window will appear, listing the .PCX files available in   the library directory. You can select any file, or change directories to another directory. A hatched box will now appear which will follow the mouse around.   This box indicates the area to be incorporated. Position the box over the area where you'd like to paste, and hit ENTER or the left mouse button.

INFORMATION (<ALT>I)

    The information menu presents the information for the current image, including the size in stitches and inches and the current evenweave count. Any and all of these bits of information can be changed and the associated information will reflect the change. But NO physical change is made to the image until OK is selected.

Default Image directory - This is the directory used for PCX and CCS file input and output. DEFAULT: directory where PCX2CCS is located.

Default Library directory - This is the directory used for library element input and output. DEFAULT: under the directory where PCX2CCS is running, it will be created the first time the program is executed.

Default RGB-DMC color file - The default file for RGB-DMC color mapping is MASTER.DMC, located in the same directory where PCX2CCS is located.

Image size - The default image size is 640x480

Default Font - The default font is MSLine Draw if available, or the system font.

Default Evenweave - The default evenweave count is 10 stitches per inch

Default strands - The default number of strands of floss is 3.

Any/all of these defaults can be permanently or temporarily changed via the <u>DEFAULT</u> option on the File Menu

CURRENT SYMBOL (<ALT>C)

The current symbol is the symbol that can be added to the image SEE ADDING SYMBOLS and is visible to the right of this option. Selecting CURRENT SYMBOL will allow you to change the symbol to add. SEE CHANGING CURRENT SYMBOL

Users of WINDOWS PCX2CCS must accept this disclaimer of warranty:

"WINDOWS PCX2CCS is supplied as is.   The author disclaims all warranties expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The author assumes no liability for damages, direct or consequential, which may result from the use of WINDOWS PCX2CCS".

WINDOWS PCX2CCS is a "Shareware program" and is provided at no charge to the user for evaluation.   Feel free to share it with your friends, but please do not give it away altered or as part of another system.   The essence of "user-supported" software is to provide personal computer users with quality software without high prices, and yet to provide incentive for programmers to continue to develop new products.   If you find this program useful and find that you are using PCX2CCS and continue to use Windows PCX2CCS after a reasonable trial period, you must make a registration payment of $40.00 to Chris O'Donnell at the address below. The $40.00 registration fee will license one copy to YOU for use on any one computer at any one time.

Anyone distributing Windows PCX2CCS for any kind of remuneration must first contact Chris O'Donnell at the address below for authorization. You are encouraged to pass a copy of Windows PCX2CCS along to your friends for evaluation.   Please encourage them to register their copy if they find that they can use it.   All registered users will are entitled to minor upgrades. In general I will upload the upgrade patches to various on-line/ftp sites. I will notify you when the patch is available. If you do NOT have on-line access, alternate arrangements can be made. I will notify you when the next version is available. The cost for mailing a MAJOR upgrade is $5.00 (US), $10.00 (Outside the US), payable BEFORE I mail it. This fee covers my mailing costs, disk costs and manual. I am NOT making any money on upgrades.

If you encounter a problem, or have any questions or comments please contact me. Any non-registered user who reports a verifiable problem will receive a free upgrade. Registered users who report a verifiable problem will receive various rewards.

Chris O'Donnell
PO Box 113
Middlebury, Ct 06762 USA
CIS: 70431,1427
Delphi: CHRISOD
Internet: 70431.1427@compuserve.com (that's a dot between the 1s)
          chrisod@delphi.com

There are a number of ways to contact me. I have 2 e-mail address. On CompuServe it's 70431,1427 (that's a comma between the 1's); on Delphi I'm CHRISOD; Via the Internet either 70431.1427@compuserve.com (now it's a dot between the 1's) or CHRISOD@delphi.com I check my e-mail no less than once a day, often more.

_You can write to me at PO Box 113 Middlebury Ct 06762 USA

_If you are truly desperate for help you may call me at 203-785-1451 I can be reached between 8AM and 9PM Eastern Time. I have an answering machine if I'm not home. I am a stay-at-home Mom with 3 boys ages 7, 5 1/2 and 4 so I'm home a lot.
    If you encounter a problem, or have any questions or comments please contact me. Any non-registered user who reports a verifiable problem will receive a free upgrade.

This is the registration form to mail to Chris. To charge your registration Click <u>HERE</u>   Mail this form and $40.00 to register WINDOWS PCX2CCS version 1.0 Send to:

Chris O'Donnell
PO BOX 113
Middlebury Ct. 06762 USA

NAME: _____

ADDRESS: _____

_____

_____

E-MAIL ADDRESS_____

_____

WHERE PROGRAM FOUND _____

____ I would like the upgrades MAILED to me, please notify me when future versions are available. I understand that this service will cost me $5.00(within US $10 international), payable in advance.

____ Please mail me minor upgrades. I understand that Chris will set aside 1 (one) disk with my name on it. She will mail me the upgrades & I will mail the disk BACK TO HER. If I don't return the disk, I will no longer receive upgrades by mail.

____ I am NOT registering because:

COMMENTS/SUGGESTIONS/COMPLAINTS(especially complaints):

Why should you register? Well, if you're NOT using this program then you shouldn't. If you are using the program then the honest thing to do is register. Of course I have no way of knowing whose not registered yet using the program, so for registered users I offer the following:

   1) a copy of the program without the obnoxious reminder to register, a printed manual, a library of ABCs and 123's, a MASTER.DMC of all 390 DMC colors, and the RGB2DMC program.

   2) Notification of minor upgrades, which can be download from various sites. OR I can mail them via USPS Please contact me for details.

   3) Major upgrades for $5.00 (within the US $10 outside US)

   4) Information on joining Delphi and getting 10 free hours.

   There are 3 ways to register PCX2CCS:

   1) If you are a member of CompuServe, GO SWREG and follow the directions. The Registration ID is 7630. The $40.00 will be charged to your credit card.

   2) Printoff REG.TXT and mail it with $40.00 to:
         Chris O'Donnell
         PO Box 113
         Middlebury Ct. 06762
         USA
   I will accept Cash, personal check, money order or bankchecks. If you are nervous about mailing cash, you can obtain a Certificate of Mailing (USPS form 3817) from your Post Office. This form is evidence that you mailed "something" to my address.

   3) You can order with MC, Visa, AMEX or Discover from Public (software) Library by calling 1-800-2424-PSL or 713-524-6394 or FAX 713-524-6389 or by e-mail CIS 71355,470 or Internet 71355.470@compuserve.com.   You can also mail credit card orders to PsL PO Box 35705, Houston TX 77235-5705. Psl number product number 11619. Please specify WINDOWS version.

         THE ABOVE NUMBERS ARE FOR ORDERS ONLY

   Any questions regarding the status of the shipment of the order, refunds, registration options, product details, technical support, volume discounts, dealer pricing, site licenses etc. must be directed to Chris O'Donnell PO Box 113 Middlebury Ct 06762 203-758-1451

   In general, I will contact you by e-mail (if you included your e-mail address) as soon as I receive your registration informing you that I receive your registration and when(approximately) will be getting your package into the mail.

   If you don't hear from me within 14 days of mailing your registration, PLEASE CONTACT ME! I usually get the registered package out within 2-3 days of receiving the registration.   I do NOT wait for a check to clear. Depending on the circumstances, you will get a replacement registration package for little or no charge. You will need to fill out USPS form 4314-C (US Postal Customer Service Card) so we can get the Post Office officially involved. Then:

   If my package failed to reach you, I will put another in the mail ASAP. (return receipt requested if you desire).

If you sent your registration by return receipt or recorded delivery, send me a copy of the document with form 4314C and Ill send you a registered user package.

If you used form 3817, send me a copy of the form, form 4314C and $5.00 (for S&H) and I'll send you a registered user package.

If all you did was put a check in the mail, send form 4314C and $5.00 (S&H) and I'll send you a registered user package.

INTERNATIONAL REGISTRATIONS

If you live outside the United States and want to register, you have the same options, BUT, I will also accept:

1) foreign currency ONLY IF THE EXCHANGE RATE IS LISTED IN BUSINESS WEEK MAGAZINE. (& add 10% for my hassle at the bank).

2) American Express Money Orders, payable in US dollars.

3) American Express travelers cheeses

4) International Postal Money Orders in US dollars

5) A Check drawn on a US bank, written in US dollars.

I will send to you a registered user package identifying the contents as: Diskettes (valued at $1.00), Book (valued at $3.00) and Intellectual Property License (valued at $36.00).   In general, only the book and diskette will be taxable.   I will send it First Class Airmail.

Right arrow - move mouse arrow 1 square to the right

Left arrow - move mouse arrow 1 square to the left

Up arrow - move mouse arrow 1 square up

Down arrow - move 1 mouse arrow square down

Page Up - scroll up 1 screen height of the grid

Page Down   - scroll down 1 screen height of the grid

<ALT>Page Up - scroll to the right 1 screen width of the grid

<ALT> Page Down - scroll to the left 1 screen width of the grid

Home - move to the top of the design

End - move to the bottom of the design

<ALT>Home - move to the left edge of the design

<ALT>End - move to the right edge of the design

C/c - move to the center of the grid no matter where in the grid you are

<ALT>F - File Menu
<ALT>E - Edit Menu
<ALT>V-   View Menu
<ALT>I - Information Window
<ALT>L - Library Menu
<ALT>C - Change Current Symbol
<ALT>H - Help Menu

_Bitmap Viewer Mode, or View mode, displays the image in it's actual size as a bitmap. This mode is different than <u>size mode</u> which shows the image as it will look if the size is changed. There are no grid lines or symbols. The following menus are available:

FILE MENU (<ATL>F)
 The file menu has all the options for file input and output. From here you   can select the image to load, save the current image, get information about an image, change the DMC file to use,   and change the configuration of the program, either permanently or temporarily and exit from the program.

EDIT MENU (<ALT>E)
    The edit menu contains options for changing both the image and the presentation of the image.

COLORS MENU (<ALT>F)
    This menu contains various options for manipulating the colors

VIEW (<ALT>V)
_This menu contains the options for returning to grid mode, displaying the box that indicates which part of the image is visible on the grid, and viewing the symbol table

INFORMATION MENU (<ALT>I)
    The information menu presents the information for the current image, including the size in stitches and inches and the current evenweave count.

LIBRARY (<ALT>L)
    The library function allows you to incorporate other PCX images into the current image. A library element is defined as any PCX file located in the directory defined as the library.

VIEW MODE EDIT MENU (<ALT>E)

CHANGE EDGES... - This option lets you clip the image size. You can move any/all of the edges of the image to a new location. Any symbols beyond the new position will be deleted.

ADD BLANK ROWS/COL TO EDGE... - This option lets you add any number of blank rows and/or columns around the edge of the image.

INSERT BLANK ROWS/COLS... - This option allows you to insert any number of   blank rows or columns into the image.

SELECT ROWS This option allows you to select rows upon which to perform subsequent operations. When this option has been selected, the cursor changes to a sideways double ended arrow. Position the cursor to a row and depress the left mouse button. Keeping the button depressed, move the cursor. As the cursor passes over rows, they will be inverse highlighted, indicating that they will be considered "selected". If you should release the mouse button prior to finishing the selection, hold down the SHIFT key and then depress the left mouse button. The select box will be extended to the current cursor position. To cancel the selection, after releasing the mouse button, hit ESC.

SELECT COLS This option is identical to SELECT ROWS, except that the cursor is now an up and down double ended arrow, and the selection process involves COLUMNS.

NOTE: The selection of rows or columns selects the ENTIRE row or column It does not matter whether or not you can SEE the entire row or column, it is considered selected.

CUT - This option is available only if rows or columns have been selected. Cutting will copy the selected row or columns to the clipboard. There are 2 suboptions: **CUT & CLEAR** which will remove the symbols in the selected rows or columns. **CUT & DELETE** will physically delete the selected rows or columns, reducing the size of the image.

CLEAR - This option, which is only available if rows or columns have been selected,   will delete the symbols in the selected rows or columns, but leave the size of the image unchanged.

COPY - This option will copy the selected rows or columns into the clipboard for subsequent pasting.

PASTE - This option is available only when there are rows or columns in the clipboard. It has 3 sub-options, Insert, Overlay Opaque and Overlay Transparent.   Insert will shift the rows or columns to make room for the rows or columns in the clipboard. Opaque will replace every square in the original image with a square a from the clipboard. Transparent will replace only those squares that have a symbol in the clipboard. Empty squares will NOT be pasted into the image.

_   Regardless of the sub-option, a hatched box will now appear which will follow the mouse around.   This box indicates the area to be pasted.   Position the box over the area where you'd like to paste, and hit ENTER or the left mouse button.

SELECT RECTANGULAR AREA - This option let you select a section of the image to manipulated. The cursor changes to a 4-way arrow, indicating that you can select rows and columns. Hold down the left mouse button on and move the cursor. Any square that the cursor passes over is considered selected. and will be inversely highlighted.   If you should release the mouse button prior to finishing the selection, hold down the SHIFT key and then

depress the left mouse button. The select box will be extended to the current cursor position. To cancel the selection, after releasing the mouse button, hit ESC.

NOTE: There is no CUT or DELETE option when dealing with rectangular areas.

COPY - This option allows you to copy the selected squares into the Windows clipboard.

CLEAR - This option will clear the selected squares.

PASTE - This option is available only when there is a rectangular area in the clipboard. It has 2 sub-options, Overlay Opaque and Overlay Transparent.   Opaque will replace every square in the original image with a square from the clipboard.   Transparent will replace those squares that have a symbol in the clipboard.

    Regardless of the sub-option, a hatched box will now appear which will follow the mouse around.   This box indicates the area to be pasted.   Position the box over the area where you'd like to paste, and hit ENTER or the left mouse button.

BITMAP - This option is active only if there is a bitmap in the clipboard.   There are 2 sub-options, Overlay Opaque and Overlay Transparent.   Opaque will replace every square in the original image with a square from the clipboard.   Transparent will replace those squares that have a symbol in the clipboard.

    Regardless of the sub-option, a hatched box will now appear which will follow the mouse around.   This box indicates the area to be pasted.   Position the box over the area where you'd like to paste the bitmap, and hit ENTER or the left mouse button.

    If the grid is empty, the color palette for the bitmap will be copied and used. If there is an image loaded, the color palette for the loaded image will be used, BUT the bitmap colors will be mapped a close as possible. Most of the time, the will be little noticeable color changes. I say "mostly" because, for example, if the loaded color palette is primarily GREEN and the bitmap is primarily RED, then you WILL notice the color changes.

SCALE - This option allows the image to be scaled up or down, in or out.   You can increase or decrease the height and/or the width. There are 2 SCALING OPTIONS, Windows and Chris's

REDUCE NUMBER OF SYMBOLS - This option lets you select the maximum number of symbols (128, 64, 32, 16 or 8) and the algorithm to be used. The existing color palette and the individual pixels in the image are used to determine the most frequently used colors. These colors will become the new color palette. Each individual pixel in the image is then examined to determine which color in the new palette is closest   (mathematically) to the original color. The numerical difference is then distributed among the neighboring pixels. How this difference is distributed depends on the algorithm.

FONTS & COLORS MENU (<ALT>F)

CHANGE COLOR PALETTE - This option will present you with a window displaying the current color palette. Since there are always 256 different symbols available, you will be shown 256 colored boxes. The window displays 20 boxes at a time. Each box is numbered 1-256 to indicate the relative position in the color palette. To change a color select a colored square, the next window has 3 scroll bars which can be manipulated to adjust the color.

TOGGLE BACKGROUND SYMBOLS - This option will toggle the background symbol on and off. When an image is loaded, this is automatically set to ON. A check mark will appear beside the menu item if the option is   ON.

VIEW (<ALT>V)

Return to Grid New Position - This option will return you to the grid showing the area of the image that is within the Grid Area box.

Return to Grid Old Original Position - This option will return you to the grid showing the same portion of the image that that was visible when View mode was selected.

Show Grid Area Box - This option lets you toggle the grid area box on and off.

View Symbols - This will present you with a scrollable list of all the symbols currently used in the image, and the DMC color number and color name assigned to the symbol. This color number and name can be changed by selecting a symbol. The DMC information will appear in 2 appropriately labeled files. You can select either field and change, edit or erase the information.

When pasting into the image, a hatched area will appear. This area defines the size of the information in the clipboard. This area will follow the movement of the mouse while the left button is depressed.

There is a new menu bar with the following options:

 PUT IT HERE will paste the information in the clipboard to the designated area.

CANCEL will abort the paste operation, restoring the original menu bar

CURRENT SIZE this information only option tells you the size of the information in the clipboard

SCALE SIZE This option allows you to scale the clipboard information before pasting it. You can increase or decrease the height and/or the width. There are 2 SCALING OPTIONS, Windows and Chris's.

_The Size Bitmap Viewer Mode, or Size mode, displays the image as it will look with the new size applied This mode is different than <u>view mode</u> which shows the image as it actually looks as a bitmap. There are no grid lines or symbols. No physical change is actually made to the image, until explicitly requested. The following menus are available:

FILE MENU (<ATL>F)
 The file menu has all the options for file   output. From here you can save the current image size, restore the original image from the disk file, print the entire chart in the new size and exit from the program.

EDIT MENU (<ALT>E)
     The edit menu contains options for changing both the image size.

COLORS MENU
     This menu contains various options for manipulating the colors

VIEW (<ALT>V)
_This menu contains the options for returning to grid mode, saving or restoring the size   and viewing the symbol table

INFORMATION MENU (<ALT>I)
     The information menu presents the information for the current image, including the size in stitches and inches and the current evenweave count.

FILE MENU (<ALT>F)

SAVE AS   - This option will allow you to change the name of the file to which the current image is being saved. This option is useful for creating multiple variations of the image.

SELECT DMC FILE   - This option will present a list of .DMC file in the current working directory. Select the file to use for subsequent images. The file will be read immediately and the DMC information will be assigned to the current image.   Non-registered users only have 1 .dmc file, the master.dmc supplied with the program. Registered users receive a program RGB2DMC that lets them create their own .dmc files.

RESTORE ORIGINAL IMAGE - This option will re-load the image from the file.

PRINT ENTIRE CHART - This option will print the entire chart.

PRINTER SETUP - This option lets you configure your printer for the current pcx2ccs session.

EXIT - This option will terminate the program. If you have made any changes to the image, you will be prompted to either save the image, not save the image or cancel the exit.

SIZE MODE EDIT MENU (<ALT>E)

RESTORE ORIGINAL SIZE - this option will restore the image to the size prior to size/scale operation

SCALE - This option allows the image to be scaled up or down, in or out.   You can increase or decrease the height and/or the width. There are 2 SCALING OPTIONS, Windows and Chris's

FONTS & COLORS MENU (<ALT>F)

CHANGE COLOR PALETTE - This option will present you with a window displaying the current color palette. Since there are always 256 different symbols available, you will be shown 256 colored boxes. The window displays 40 boxes at a time. Each box is numbered 1-256 to indicate the relative position in the color palette. To change a color select a colored square, the next window has 3 scroll bars which can be manipulated to adjust the color.

TOGGLE BACKGROUND SYMBOLS - This option will toggle the background symbol on and off. When an image is loaded, this is automatically set to ON. A check mark will appear beside the menu item if the option is ON.

VIEW (<ALT>V)

Return to Grid - This option will return you to the grid. If you have NOT saved or restored the image size, you will be prompted to either SAVE the current size, or not.

SAVE CURRENT SIZE TO GRID - This option will save the current size to the grid. You will then be put into <u>Bitmap Viewer Mode</u>

RESTORE ORIGINAL SIZE - This option will restore the bitmap image to the original size, prior to any size or scaling. You will then be in <u>Bitmap Viewer Mode</u>

View Symbols - This will present you with a scrollable list of all the symbols currently used in the image, and the DMC color number and color name assigned to the symbol. This color number and name can be changed by selecting a symbol. The DMC information will appear in 2 appropriately labeled files. You can select either field and change, edit or erase the information.

There are 2 scaling algorithms called **Windows** and **Chriss** because when reducing the size of an image, I didn't like the way Windows manipulated the image. So I implemented my algorithm. The differences are this:

1) The Windows algorithm is faster when displaying the new size, my algorithm has to recompute the new size, and recreate the bitmap image, so it's a bit slower.

2) When increasing the size of an image, there is no advantage. 3) When decreasing the size, (IMHO) My algorithm does a better job with complex images. To see the differences, load FROG.PCX and reduce the size first with the Windows algorithm then with mine.

Once you have selected an algorithm, you have to use that method until the image is either restored to it's original size, or you save the current size. You cannot switch methods while scaling or sizing.

Q What's the difference between PCX and CCS?
A A PCX image is one that has been encoded using the PCX algorithm. It can be viewer using (almost) any graphics viewer.
A CCS image is an image that PCX2CCS has encoded. It cannot be read by any other program except PCX2CCS. It contains information specific to the chart for the image. Such as Symbol font, DMC colors assigned to symbols and other information.

Q I load an image and I don't see anything in the squares. Why?
A It is possible that the section of the image that you are looking has white symbols. White symbols against a white background are invisible. From the EDIT MENU select TOGGLE BLACK & WHITE SYMBOLS and ALL the symbol will be drawn black.

Q How do I save a work in progress?
A From the FILE MENU select either SAVE to save the image to the same file from which it was loaded, or select SAVE AS to change the name of the file.

Q How do I delete a library image that I no longer want as part of my library?
A Using the WINDOWS FILE MANAGER go to the library directory. By default it is a /lib directory underneath the directory where PCX2CCS is running from. Delete any unwanted file.

Q How do I add or delete just 1 individual symbol?
A Position the mouse arrow so that the tip of the arrow is over the square where you would like to add or delete the symbol. Depress the left mouse button (or use the ENTER key) to add the symbol. Depress the right mouse button (or use the DEL key) to delete the symbol.

Q Scroll through the grid is slow and tedious. Is there a faster way to maneuver?
A Sure is. You can go to the TOP of the image by depressing HOME. You can go to the BOTTOM by depressing END. <CNTL>HOME takes you to the LEFT edge. <CNTL>END takes you to the RIGHT edge. C will take you to the CENTER of the image.

_Another way to move through the image this: Select VIEW IMAGE from the VIEW menu. Once the image is visible, you'll see a box. This box represents the section of the image that was seen in grid mode. Position the mouse arrow over the box, depress the LEFT mouse button and move the mouse. The box will follow the arrow. When the box is positioned over the section you would like to see on the grid, release the button. Now select the VIEW menu, and select RETURN TO NEW POSITION. You will be back in grid mode, looking at the section you choose. Change your mind? Return to the grid via the RETURN TO ORIGINAL POSITION option.

Q: I'm having a problem. Although I can get the chart I can't get the symbol table to print. What shall I do?
A: There are 2 fonts that are used for printing the symbol table. One is the symbol font, the same font used to display the symbols. The other font is called the "DMC symbol font". This font can be changed via the DEFAULTS option on the <u>FILE menu</u>. If you are having problems printing the symbol table try changing this font.

Q: I can't get a chart! All I get is a squished bunch of lines.
A: Try changing the symbol font. You can do this using either the FONT & COLORS menu or the DEFAULTS option on the FILE menu. Not all printers support all fonts. Try a TT font and see what happens.

Also make sure you have the latest and greatest version of your printer driver. If you are printing in color, make sure the driver is configured to print in colors.

Q: The chart takes up SOOOO much paper. Why and what can I do?
A: Change the size of the font. From the FONTS AND COLORS menu select CHANGE FONTS and change the size.

Q: OK, I've done that and it looks OK. Do I have to do this EVERY time?
A: Nope, on the FILE menu, select DEFAULTS. From there change the DEFAULT SYMBOL FONT to the font and size that youd like to use whenever you load an image file.

Q: My printer stalled and died while printing the chart. Do I have to restart from page 1.1?
A: No, on the PRINT window, you can specify start and stop pages. You can do this at any time.

This tutorial will cover the steps in creating charts with PCX2CCS.

<u>Lesson one</u> covers a simple load, view   and print

<u>Lesson two</u> covers changes and setting program defaults

<u>Lesson three</u> covers scaling and sizing

<u>Lesson four</u> covers symbol reduction and dithering

In this lesson we will load a PCX image, and print the chart.

1) From the FILE MENU select LOAD...

2) From the file dialog select SAMPLER.PCX
   (Steps 3 through 7 are optional)

3) From the VIEW MENU select VIEW IMAGE

4) Now you can see what the sampler looks like

5) That box indicates the area of the sampler that was visible on the grid. You can move this box by positioning the mouse arrow over the box and depressing the left mouse button. Move the mouse and the box will follow. When the box is over a section youd like to see release the mouse button.

6) You can return to the grid via the VIEW MENU if you select RETURN TO NEW POSITION you'll return to the area encompassed by the box. If you select RETURN TO ORIGINAL POSITION you'll return to the same area of the grid that you were look at before.

7) From the FILE MENU select PRINT ENTIRE CHART.

8) You may provide an additional title, or delete the current title.

9) Click on OK.

10) That's it, the chart will print. Following the chart will be a separate page containing the symbol table.

11) Now repeat steps 7 & 8. This time select PRINTER OPTIONS. You will be presented with the printer dialog for your printer. You can change the paper orientation from Portrait to Landscape

12) Now repeat step 1, this time loading OWL.PCX.

13) To see more of the image in the grid, you'll need to reduce the font size. From the FONTS AND COLORS menu select CHANGE FONT. You will presented with the standard font dialog. You can change the font used for the symbols, you can changed the size of the font and you can make the symbol font **bold** and/or *italic*. Reduce the size of the font and select OK

14) You will now be able to see MORE of the image in the grid than before.

In this lesson we will load a PCX image & play with the size.

1) Load the OWL.PCX

2) Now, what we're going to do is make the appropriate changes to stitch an 18'X18' pillow. All the information we need to provide will be on the INFORMATION Menu so select that menu. 3) First of all, we're going to use 18 count material so change the EVENWEAVE field to 18. All this does is change the mathematics involved in computed size and number of skeins of floss. The visual representation of the image does not change

4)Now, since we're use 18 count, we'll use 2 strands of floss, so change the STRANDS OF FLOSS field to 2

5) Now the inch size of the finished article is only 4.XX inches. Way to small for a pillow. So one at a time, select INCHES HIGH and INCHES WIDE and change the number to 18.

6) Now select OK. You will be put into a graphical image mode. This is showing you what the image would look like IF you apply the changes. So far, nothing has been changed. This mode is called SIZE MODE

7) Now let's check the number of skeins of floss we'll need to actually stitch this pillow. Select VIEW and then select VIEW SYMBOLS. Here is a list of the DMC colors associated with each symbol. Following each name is a number in parentheses. This is the number of skeins of floss needed for each symbol. From here you can also change the DMC color by selecting the symbol and then entering NEW information in the appropriate fields. Select OK, if you've changed some information, CANCEL to NOT save any changes, PRINT to print JUST the symbol list, or MERGE to merge any symbols that have the same DMC color number assigned to them. 8) You can make any further size adjusts by selecting INFORMATION and entering new sizes,

9) When you are done select VIEW . To KEEP this size and stay with a graphical view, select SAVE CURRENT SIZE TO GRID. To get rid of this size, select RESTORE ORIGINAL SIZE. Both of these options will put you into VIEW MODE To return to the grid, select RETURN TO GRID. IF you attempt to return to the grid without saving the new size, you will be prompted to either save the size or not.

10) Now, I realize that there is 1 part of the INFORMATION window that I haven't mentioned. In the lower right corner are 2 buttons identified as SIZING ALGORITHM. The following steps will illustrate the difference between these.

11) Load FROG.PCX. You can do this from the GRID MODE or from VIEW MODE

12) From the EDIT MENU in grid mode or the EDIT MENU in Viewer mode select SCALE.

13) In the SCALE HEIGHT box, select SCALE DOWN 1:2. In SCALE WIDTH, select SCALE DOWN 1:2. Leave the SIZING ALGORITHM set to WINDOWS and click on OK

14) You should now see a strange looking frog, half the height and half the width of the original. This is the WINDOWS algorithm

15) Select RESTORE ORIGINAL from the EDIT MENU

16) Repeat step 13, this time selecting CHRIS.

17) Now you should see a better looking frog. This is the difference between the 2 algorithm.

Reducing the size of a complex image is much better, although slower using my algorithm.

18) Repeat step 15.

19) Repeat steps 12 through 16, this time scaling UP just the height. (if you want to scale up the width, you'll need to change the maximum width Lesson 3)

20) Repeat steps 11-19 but use OWL.PCX or DUKBOP.PCX. You should not notice any difference.

In this lesson we'll adjust the program default configuration.

There are program defaults. The maximum size of an image that can be loaded is 640x480. The default directory for images is the directory where PCX2CCS is running from. The default library directory is LIB under the image directory. This directory is created the first time PCX2CCS is executed. The default evenweave count is 10 and the number of strands of floss is 3. The default fonts are MSLineDraw or (if the LineDraw font is not found) the "standard" fixed ANSI font, usually Courier.

All of these defaults can be changed via the DEFAULTS... option on the FILE MENU in Grid mode.

1) Select DEFAULTS from the File Menu.

2) If an image is loaded you CANNOT change the maximum image size.

3) Change whatever options youd like.

4) Click on SAVE to create a file called pcx2ccs.cfg. This file contains your options. Every time the program starts it looks for pcx2ccs.cfg. If it's there these are the defaults that will be used.

5) If you only want to change the defaults temporarily, click on OK. The defaults will be changed for THIS EXECUTION of the program.

In this lesson we'll play with symbol reduction.

1) Load the FROG.PCX

2) You can perform symbol reduction from either the GRID MODE EDIT MENU or the VIEW MODE EDIT MENU

3) Select SYMBOL REDUCTION.

4) On the left are the choices for the number of symbols. This is not an EXACT number, rather is it considered "NO MORE THAN". Select the maximum number of symbols youd like to work with. This will determine how many colors are to be in the color palette.

5) On the right is listed the different algorithm for determining how to remap the image to the new colors palette. REMAP ONLY will perform mathematical adjustment of the colors. There will be no attempt to dither the image. The other options (Floyd, Burkes and Stucki) are the different dithering algorithms. A complete description is in the reference manual (available to registered users)

6) Click on OK to perform the symbol reduction. The amount of time this process takes depends on the options you selected and the size of the image. Various "Wait" messages will appear during the various stages of the process. First the colors in the image are counted. Then new color palette is created. If selected a dithering algorithm the image is then dithered, otherwise the colors are remapped. The resulting is then displayed.

7) Reducing the number of symbols changes the image, unlike scaling and sizing, there is no preview of the results. If you decide that you don't like the resulting image, select RESTORE IMAGE FROM FILE from the FILE MENU and try again.