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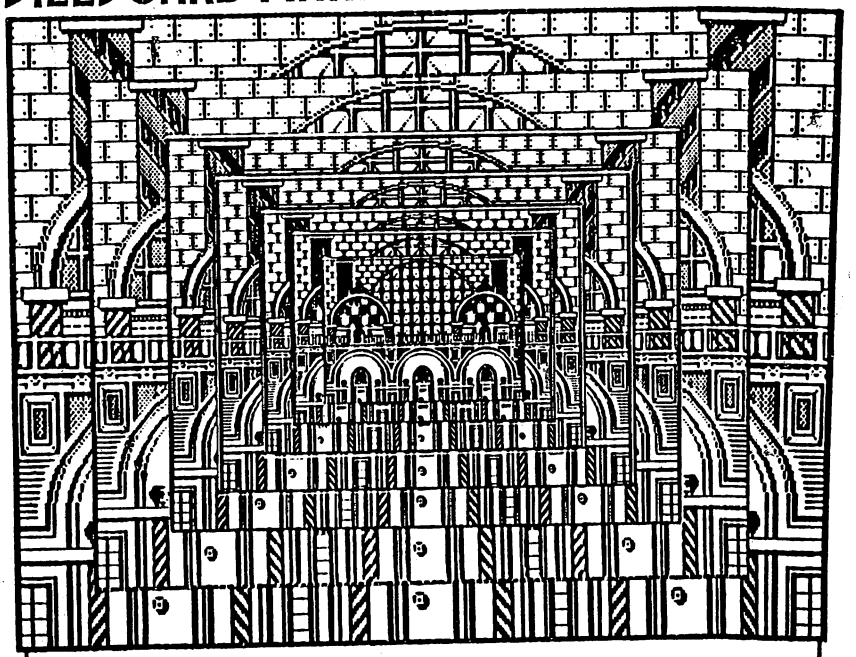

BLOWS UP YOUR COMPUTER GENERATED GRAPHICS TO BILLBOARD SIZE

solutions unlimited

ACKNOWLEDGMENTS

Our special thanks to Frank Viola for the musical adaptation, and Mike Anstett, Troy Ganzer, and Larry Gulley for their assistance, encouragement, and support.

This product is dedicated to William Plank, without whose name this product would not be possible.

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TABLE OF CONTENTS

ACKNOWLEDGMENTS 1
COPYRIGHT 2
QUESTIONS AND ANSWERS 4
BUZZWORDS AND CONCEPTS 6
SAMPLE WALK-THROUGH SESSION 8
MAKING A CHOICE 14
ABOUT THE ROOMS 15
START-UP 16
THE PHOTO LAB 17
    BULLETIN BOARD 18
    IRONING BOARD 19
    POSTER BOARD 20
    CUTTING BOARD 21
    CLIP BOARD 22
    SWITCH BOARD 24
THE TYPESETTER 25
    BULLETIN BOARD 26
    BLACK BOARD 28
    KEY BOARD 29
    SWITCH BOARD 32
THE PRINTING PRESS 33
    BULLETIN BOARD 34
    CIRCUIT BOARD 37
    SWITCH BOARD 39
THE INCREDIBLE OPTIMIZER 40
THE AMAZING TYPESETTER 41
PRINTER CARE 42
CONVERSION TECHNIQUES 43
ADDITIONAL PROGRAMS ON BILLBOARD MAKER DISK 44
    CONTROLLER BOARD 45
    BILLBOARD MAKER PRINTER UTILITY 47
    FLEXI-TO-DOODLE 49
HINTS 50
HEY ALL YOU ARTISTS! 53

HOW CAN MY 8 1/2" WIDE PRINTER DO ALL OF THIS?

BILLBOARD MAKER has a specially designed auto/link routine that handles most of the work, removing nearly all user hassle. This feature will output enlarged pictures in strips, minimizing cutting and splicing. This insures accurately enlarged picture reproduction.

WHAT USES DOES BILLBOARD MAKER HAVE?

* True Sign and Poster Production: You now have the ability of generating high quality signs and posters for home, business, and school use. You can review and modify the picture using the Standard Print Dump feature, then generate a perfect enlargement.

* Decoration: The quality of BILLBOARD MAKER's enlargements will offer a new medium for art and painting never before available!

* Drafting: You will now be able to expand computerized layouts to table size for presentation work!

* Life-Sized Photo Reproduction: Using Computer Eyes, you can enlarge a digitized picture of a person to a full life-sized representation!

The sky is the limit! Considering the power of BILLBOARD MAKER, the actual number of uses in the home, business, and education environments are seemingly limitless. After using our product and discovering the applications they enhance, please drop us a line and let us know about them!

BILLBOARD MAKER
QUESTIONS AND ANSWERS

WHAT IS BILLBOARD MAKER?

BILLBOARD MAKER is a sophisticated graphic product that allows a user to enlarge existing graphic drawings to high quality signs, posters, or extraordinary murals! It has the capability of expanding graphic images generated by Doodle, The Koala Pad, Flexidraw, Animation Station, Super Sketch, Blazing Paddles, The Print Shop, and Computer Eyes. No longer are your graphic masterpieces limited to the standard 8 1/2" by 11" printed format.

HOW GOOD IS THE QUALITY OF THE ENLARGEMENT?

BILLBOARD MAKER utilizes a special GRAPHIC OPTIMIZER to smooth hi-res pictures as it expands them. You will certainly be amazed at the results! No other product has this advanced capability. Also, you can alter previously enlarged pictures to include additional details never before available on your Commodore 64.

ARE THERE ANY ADDITIONAL FEATURES?

Yes, many! Here are just a few:

* Picture Framing: You can select from a group of different types of frames to complement your picture.

* Picture Cropping: You can center or offset any picture in a frame for just the right positioning effect.

* Text Overlays: You can overlay any picture with text using many different font styles.

* Negative Invert Option: Hi-res black-on-white can be inverted to white-on-black for those special effects!

* Flip Invert Option: Flip any picture horizontally for iron-on applications that require inverted lettering.

* Upsidedown: Flip any picture vertically for that special effect needed in your own programs.

* Standard Print Dump: This option prints a standard 8 1/2" by 11" dump of any picture for review before enlargement.

One of the most advanced features of BILLBOARD MAKER is its OPTIMIZER. The major drawback in enlarging a hi-res picture is the fact that in the enlarging process, any ragged lines in the picture are magnified, the result many times being undesirable and unattractive. Although the picture is larger, you must view it at a distance to appreciate the enlargement. Well, this problem has been overcome thanks to the OPTIMIZER. This feature will automatically enhance and smooth out those ragged edges, taking a normal 320 by 200 pixel image to 640 by 400 pixel resolution in the final enlarged printed image. In the MURAL size option, this resolution DOUBLES AGAIN, resulting in a 1280 by 800 pixel resolution in the final enlarged printed image. This means that your clear, quality art can now be appreciated up-close as well as at a distance. The logic of the optimizer has been designed to take into account various shading patterns and will not over-optimize sections of your art that contain certain highlighting drawn in intentionally by the artist. This function is fully automatic and will save many hours of detailing that often accompanies the enlargement process.

One final note about detailing: each enlarged section of your picture becomes a stand-alone file which can be loaded into the product format you have chosen. Since that picture section is now either 1/4 or 1/16 of the original picture, you can add incredible detail to each one. For example, blades of grass or bark on trees now become attainable realities! Check the HINTS section for further information.

BILLBOARD MAKER allows you to escape any situation by pressing the RESTORE key. For example, you may abort a file load, a printer operation, an Overlay process, and so forth simply by pressing the RESTORE key.

That's about it for concepts and features for now. Welcome to the BILLBOARD MAKER system. Let's move on to the actual operation of BILLBOARD MAKER, the ULTIMATE graphic utility, with a sample walk-through session.

OVERVIEW:
BUZZWORDS AND CONCEPTS

You now own a system that can do some very amazing things with computer graphics. You also have a way of converting these pictures to other formats (through BULLETIN BOARD). For example, you can now convert a Print Shop Screen Magic picture into a Doodle picture, or vice versa. You can also convert any image into BILLBOARD MAKER's own format which allows you to use the picture in your own Basic and machine language programs! (Through the use of the CONTROLLER BOARD program. See the CONTROLLER BOARD section of the manual for more information.) Check the HINTS section of this manual for what the different techniques have to offer.

Please read this manual carefully. The unique menu system has been designed to allow extremely fast and accurate control of the program. The entire system (ALL modules of BILLBOARD MAKER) is in memory at the same time. The only disk access after the program initially loads will be to load and save pictures or to load different frames or fonts. The systems takes up over 63k of internal memory and works with up to four hi-res pictures in memory at one time!

We have designed what we feel to be a truly unique, controllable operating menu environment. This design concept moves options through the selection areas enabling you to scan through them very rapidly. Great pains were taken to design and develop this menu environment so that the product would be highly functional while allowing maximum user flexibility and ease of use.

The TYPESETTER feature allows you to overlay pictures with different text fonts and icons. You now have the ability to make true signs and posters for many different applications.

You will be able to select different types of frames for your art, crop the picture within the frame, and view it dynamically so that the subject is positioned exactly the way you want it!

(NOTE: Place the BILLBOARD MAKER disk back in the disk drive at this time.)

Press SHIFT CLR/HOME.	The working copy picture will now appear, along with the "CLEAR ORIG" prompt at the top of the screen.
Press the letter "N."	You will be returned to the PHOTO LAB menu with the original still in memory.
Press the CURSOR RIGHT key.	The Horizontal Menu will change to IRONING BOARD. The Icon Box will show a new picture and the Vertical Menu will have a new selection of choices.
Press the CURSOR RIGHT key.	The Horizontal Menu will change to CUTTING BOARD. The Icon Box will show a new picture and the Vertical Menu will have a new selection of choices.
Press the CURSOR DOWN key.	The Vertical Menu will scroll up.
Press the CURSOR DOWN key until "3-D" is selected. Press RETURN.	The Icon Box will prompt you to "INSERT DISK."
Press RETURN.	The drive light will go on. The Icon Box will say "WORKING..." You will then be shown your original picture with a frame image super-imposed on it.
Press the letter "B" key followed by CURSOR KEYS (in all directions).	The original picture will slide in very small movements.
Press the letter "C" key followed by CURSOR KEYS (in all directions).	The original picture will slide in larger movements.
Press the letter "O" key.	The original picture will return to the beginning picture before any movement took place.

SAMPLE WALK-THROUGH SESSION

The following walk-through has been designed to try to get you comfortable with the program and some of its features immediately. BILLBOARD MAKER is a complex program that offers the user many options and outlets for their creative computer art. We hope that this example will better familiarize you with the potential of BILLBOARD MAKER.

USER ACTION:	BILLBOARD REACTION:
LOAD ":*",8,1	The program will load. The opening credits will appear, after which the program will finish loading. The menu screen will then appear in the PHOTO LAB/BULLETIN BOARD section.
Press the CURSOR DOWN key.	The Vertical Menu will move up in the box.
When the appropriate picture format is highlighted, press RETURN.	The Icon Box will prompt you with "INSERT DISK."

(NOTE: Since the picture file is on another disk, you should put that disk in the disk drive at this time.)

Press RETURN.	The disk light will go on. The Icon Box will say "WORKING..." and the first picture filename will appear on the Prompt Line at the bottom of the screen.
Press the CURSOR DOWN key until the picture file you wish to load appears.	Different picture filenames will appear in the Prompt Line.
Press RETURN.	The disk light will go on again and the picture you selected will soon appear on the screen. The prompt SET ORIG will appear at the top of the screen.
Press the letter "Y."	You have now made the picture your original working copy and you are now back at the PHOTO LAB menu.

Press the CURSOR KEYS. (All directions)	The Capture Box will move across the blank Layout Plate.
Press RETURN.	A copy of the letter "T" is placed on the Layout Plate.
Press the letter "Q."	You will be returned to the Font Plate.
Place the Capture Box over the letter "E" and press RETURN.	You will be transferred to the Layout Plate with the letter "E" in the Capture Box in the center of the screen.
Press the CURSOR KEYS and place the letter "E" next to the letter "T."	The Capture Box with the letter "E" will move across the Layout Plate until you have it in the proper position.
Press the "J" key.	The letter "E" moves one pixel to the left in the Capture Box.
Press the "K" key.	The letter "E" moves one pixel to the right in the Capture Box.
Press the "I" key.	The letter "E" moves one pixel up in the Capture Box.
Press the "M" key.	The letter "E" moves one pixel down in the Capture Box.
Press RETURN.	A copy of the letter "E" is places on the screen.
Press the letter "Q."	You will be returned to the Font Plate.

Continue this same procedure until you have spelled the word "TEST" on the Layout Plate.

While the Layout Plate is showing, hold the SHIFT key down and press the letter "J."	The entire Layout Plate (in this case, the word "TEST") moves one pixel to the left.
Hold the SHIFT key down and press the letter "K."	The entire Layout Plate moves one pixel to the right.

Press RETURN.	The frame will become clear on the original and you will be prompted to "SET ORIG."
Press the letter "Y" key.	The frame will become permanent on the working original. You will be returned to the PHOTO LAB Menu.
Press the CURSOR RIGHT key.	The Horizontal Menu will change to CLIP BOARD. The ICON BOX will show a new picture and the Vertical Menu will have a new selection of choices.
Press the CURSOR RIGHT key.	The Horizontal Menu will change to SWITCH BOARD. The Icon Box will show a new picture and the Vertical Menu will have a new selection of choices.
Press the CURSOR DOWN key repeatedly, stopping at "TYPESETTER."	The Vertical Menu will move up.
Press RETURN.	The Icon Box will prompt you to "INSERT DISK."
Press the CURSOR RIGHT key.	The Horizontal Menu will change to KEY BOARD. The Icon Box will show a new picture and the Vertical Menu will have a new selection of choices.
Press RETURN.	The Font Plate will now appear.
Press the Function Keys. (F1, F3, F5, F7)	The Capture Box in the center of the screen will change in size.
Press the CURSOR KEYS. (All directions)	The Capture Box will move over the letters.
Place the Capture Box over the letter "T" and press RETURN.	You will be transferred to the Layout Plate with the letter "T" in the Capture Box in the center of the screen.
Press the numbers "1," "2," and "3."	The Position Grid will change in density.

Press RETURN.	You will be moved to the PRINTING PRESS. The text will turn Purple and the Horizontal Menu will be showing BULLETIN BOARD.
Press the CURSOR RIGHT key.	The Horizontal Menu will change to CIRCUIT BOARD. The Icon Box will show a new picture, and the Vertical Menu will have a new selection of choices.

MAKE SURE YOUR PRINTER IS ON! If you are NOT using a Commodore printer, MAKE SURE THAT THE LINEFEED SWITCH IS IN THE OFF POSITION ON YOUR INTERFACE!

Press the CURSOR DOWN key repeatedly until you have highlighted your printer type (or its compatible).	The Vertical Menu will move up.
Press RETURN.	The printer will reproduce the original in memory.

This walk-through of BILLBOARD MAKER is not designed to show you all of the features of the product. Its main purpose is to give you a feel for the type of operations you can perform with this utility. The walk-through does not demonstrate the enlargement process. It is best to read this entire manual to better understand the incredible potential that is available and test these features.

Hold the SHIFT key down and press the letter "M."	The entire Layout Plate moves one pixel down.
Hold the SHIFT key down and press the letter "I."	The entire Layout Plate moves one pixel up.
Press the letter "Q."	You will be returned to the Font Plate.
Press the letter TYPESETTER Menu.	You will be returned to the "Q."
Press the CURSOR DOWN key repeatedly until "TYPE: SOLID" is selected.	The Vertical Menu will move up.
Press RETURN twice.	The word "SOLID" will change to "HOLLOW," then to "SOLID" again.
Press the CURSOR DOWN key repeatedly until "OVERLAY PLATE" is selected.	The Vertical Menu will move up.
Press RETURN.	The screen will blank for a few seconds and finally you will be shown your new creation. It should be a Shadow Space Font saying "TEST" overlaying the 3-D framed Faded Rug design!
Press the letter "Y."	This will set the new creation as an original working copy.
Press the CURSOR RIGHT key.	The Horizontal Menu will change to SWITCH BOARD. The Icon Box will show a new picture and the Vertical Menu will have a new selection of choices.
Press the CURSOR DOWN key repeatedly until "PRINTING PRESS" is selected.	The Vertical Menu will move up.

COPYRIGHT

The computer programs of BILLBOARD MAKER as well as this instruction guide are copyrighted by, and contain proprietary information belonging to, Solutions Unlimited, Inc.

You may not copy or reproduce either the program disk or this manual. You may not electronically transfer the program from one computer to another.

WARRANTY AND LIABILITY

Solutions Unlimited, Inc. makes no warranty, either express or implied, as to the performance, quality, or fitness for any use with respect to the BILLBOARD MAKER disk, this manual, or any related items.

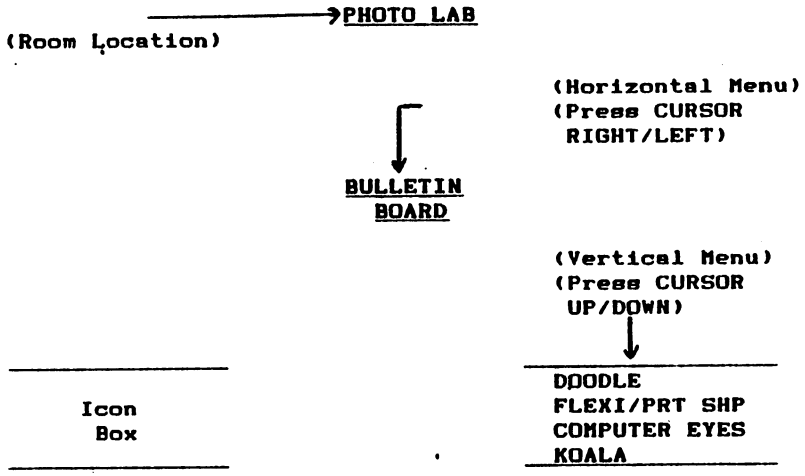
In no case will Solutions Unlimited, Inc. be held liable for damages direct, indirect, or incidental resulting from any defect or omission in this documentation, the BILLBOARD MAKER disk, or other related items and processes such as, but not limited to, any interruption of service, loss of business, anticipated profit, or other consequential damages.

This statement of limited liability replaces all other warranties or guarantees expressed or implied.

BACKUP POLICY

Solutions Unlimited, Inc. will provide one backup of BILLBOARD MAKER. To order, mail $10 (check or money order) and an ORIGINAL PROOF OF PURCHASE to:

Solutions Unlimited, Inc.
P.O. Box 177
Dobbs Ferry, NY 10522-0177



In the top box of the operating menu, you will see the name of the room you are presently in. The system starts by placing you in the PHOTO LAB. You can enter the other rooms by using the Horizontal Menu and selecting the SWITCH BOARD, which will give you a Vertical Menu choice of the additional rooms available. All choices are selected using the cursor functions. Execution is accomplished by pressing the RETURN key. After making the choice, you can move to another Horizontal Menu item and BILLBOARD MAKER will remember your selection. Therefore, you can set the Vertical Menus without pressing RETURN and move to the next Horizontal Menu item to preset all requirements prior to execution. Certain additional input may be required, such as a filename to save, or a DOS command at the prompt. These input prompts will appear in the Icon Box and the Input Line (located on the bottom of the main BILLBOARD). Take some time to get used to the menu operation. This feature has been developed to allow you great flexibility, speed, and ease of use.

ABOUT THE ROOMS

There are three different rooms in BILLBOARD MAKER. In each room you are able to perform different types of functions to your art work. When the system first starts, you will find yourself in the PHOTO LAB. By pressing the CURSOR LEFT/RIGHT keys, you will scroll across the Horizontal Menu to view the different selections that are available. The PHOTO LAB offers you a choice of six different horizontal operations. As in a real PHOTO LAB, you will be able to work with your picture by enlarging it, framing it, flipping it, creating negative of it, and much more! The TYPESETTER gives you the capability of overlaying your picture with text and icons. It works just like a real typesetter! With it, you can create very attractive signs or posters of your original art. Finally, there is the PRINTING PRESS. In this room, you will operate your printer to reproduce the art work you have prepared in the other two rooms. You can go from one room to another by simply moving through the Horizontal Menu with the CURSOR LEFT/RIGHT keys until SWITCH BOARD is selected. When there, use the CURSOR UP/DOWN keys to select the room you wish to enter and press RETURN. As you pass through the different selections on the Horizontal Menu, notice that the Icon Box shows different pictures describing the processes that take place! Note that the selections you make on the Vertical Menus are set at what they were last. This feature allows you to preset certain choices so resetting is not always necessary. Changing rooms also causes text colors on the Main Menu to change for quick reference. Now, take some time to go from room to room and get a feel for what the product can do for you! The manual has been divided into three main sections, one for each of the three rooms in BILLBOARD MAKER. Let's get started making a BILLBOARD!

Turn on your:

Printer
1541 Disk Drive
Commodore 64
Monitor

If you are using a printer other than a Commodore-brand printer, make sure the interface's line feed switch is OFF. Load the printer with paper and set it to the top of the page.

Place the BILLBOARD MAKER disk in the disk drive and type:

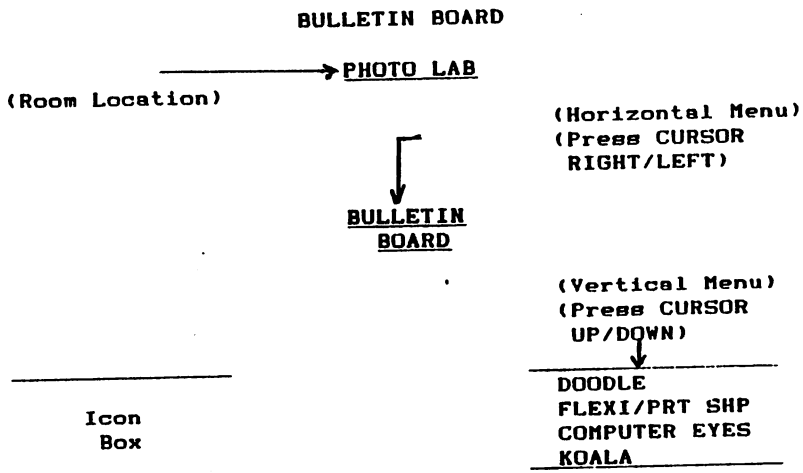
LOAD ":*",8,1 <RETURN>

After a few moments, the screen will turn white and the opening screen will start. You can bypass the opening credits by pressing the RUN/STOP key. After the opening credits, the screen will turn black and the loading process will continue. When it is finished, the Main Menu will appear and BILLBOARD MAKER is ready for use.

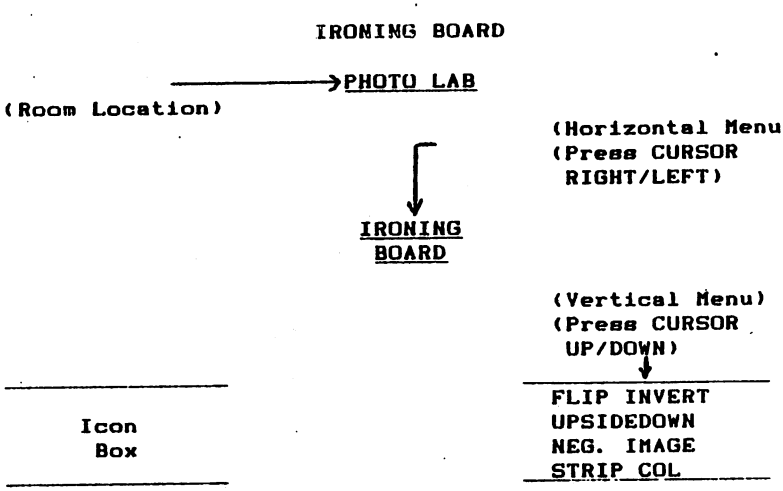
BILLBOARD MAKER is compatible with FAST LOAD (c Epyx). Some early vintage 1541 disk drives may require you to turn them OFF and then ON again after loading the program if using the FAST LOAD cartridge in conjunction with BILLBOARD MAKER.

Remember that BILLBOARD MAKER uses over 63,000 bytes of memory to operate. Make sure your machine is in good operating condition and your disk drive is in alignment.

THE PHOTO LAB



BULLETIN BOARD allows you to load a pre-drawn picture file into BILLBOARD MAKER. By using the CURSOR UP/DOWN keys to move across the Vertical Menu, you can choose the product that was used to create your picture. Press RETURN to make the selection and a prompt in the Icon Box will request that you put the appropriate disk in the disk drive. After the disk has been put in the disk drive, press RETURN again and BILLBOARD MAKER will look on the disk for all files that were created by the product you had specified in the Vertical Menu. The files found will be displayed on the bottom of the menu one at a time. In order to look at the name of each picture file, press the CURSOR DOWN key. When you finally reach the picture you wish to load, simply press RETURN and the system will load the picture into memory. The picture will be displayed and there will be a prompt at the top of the picture stating SET ORIG. At this point you must answer either "Y" or "N." If you answer "Y" the picture becomes permanent in memory and becomes your working copy. If you answer "N" the picture will be erased and whatever was in memory prior to the load will remain. You can use this feature to check different pictures on the disk without losing the working copy you have in memory. Attempting to load a picture file will erase both the current font and the overlay plate in memory.



IRONING BOARD allows you to "iron out" the changes you may want to make to your original. Simply choose what you want to do in the vertical menu with the CURSOR UP/DOWN keys.

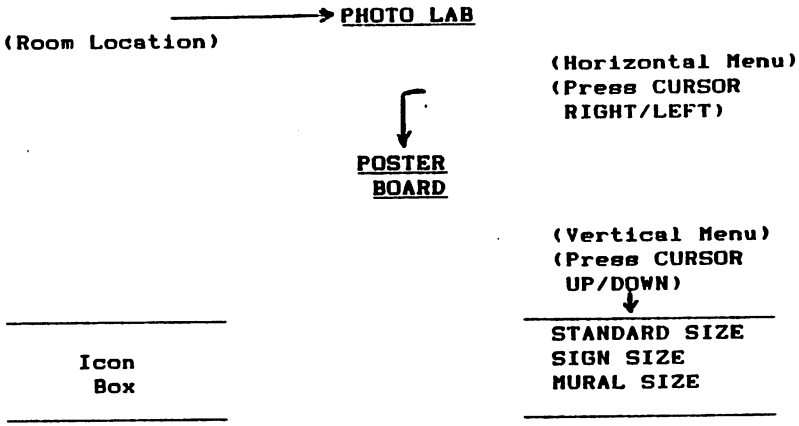
FLIP INVERT: This option reverses the current picture from left to right. After you choose this function, press RETURN and watch the original flip over. This is particularly handy for iron-on applications where you will need to reverse the text in order to read it.

UPSIDEDOWN: Simply press RETURN and the picture in memory will be flipped from top to bottom.

NEG. IMAGE: Press RETURN after choosing this option and watch what happens: the picture will be changed from black-on-white to white-on-black. This feature works well with hi-res pictures that have been color stripped. Using NEG. IMAGE on hi-res color pictures will often times result in strange color bleeding.

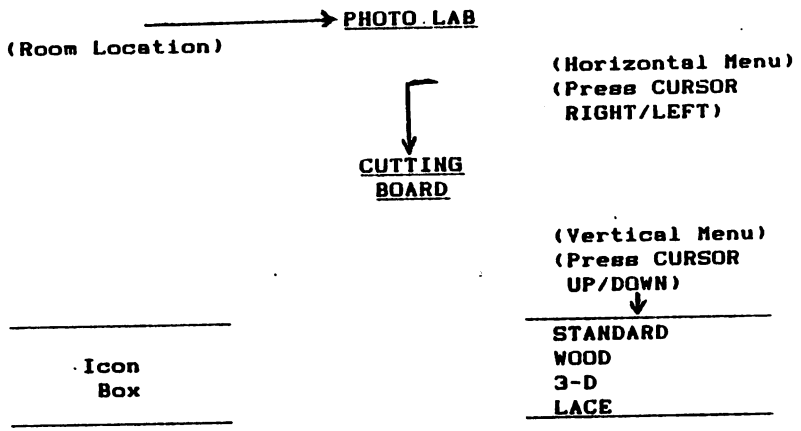
STRIP COLOR: This function removes all color from a hi-res picture. It sets the picture to black-on-white. Simply make this choice on the Vertical Menu and press RETURN. Use it for poster and sign making where black and white will yield the best results.

After BILLBOARD MAKER performs any IRONING BOARD operations, you will be requested to SET ORIG. Answer "Y" to make the change permanent in memory.
NOTE: NEG. IMAGE and STRIP COLOR only work with HI-RES ORIGINALS.

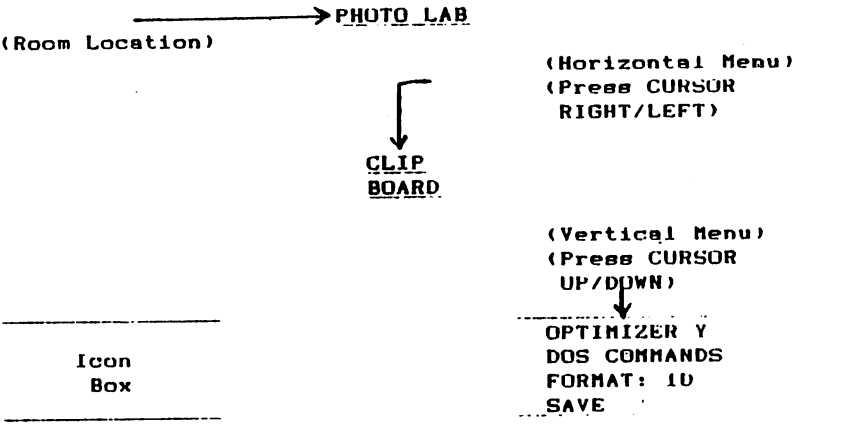


POSTER BOARD permits you to select the size of your reproduction. You can chose from STANDARD SIZE printer dumps, SIGN SIZE printer dumps (four times the normal size), and MURAL SIZE printer dumps (sixteen times the normal size). It is not necessary to press RETURN after making the size selection. The system will check to see what size was chosen last when you SAVE your picture. There are many ways of creating infinite size reproductions. Check the HINTS section of this manual.

CUTTING BOARD



CUTTING BOARD allows you to do some great things to your working copy. You will find a selection of frames in the Vertical Menu box. These frames will overlay your working copy. Each frame is different and each will give your picture a different effect. The FRAME DISK choice is for future frames that will be released. After selecting a frame you will see the working copy with the frame overlay on it. The image of the frame will be somewhat distorted, but you can view the relative position of your art in relationship to the frame. NOW for some MAGIC! Press "B" for a black and white picture or "C" for color followed by a CURSOR UP/DOWN or LEFT/RIGHT and see what happens. The entire picture will slide under the frame allowing you to position it exactly the way you want it. You can Crop your picture in this manner. In case you make a mistake, press "O" (the letter "O") for the Original Position of the picture before you started moving it around. When you are satisfied with the pictures, press RETURN. You'll be prompted with SET ORIG. If you wish to try another frame, answer "N" and the original picture will become the working copy. At that point, choose another frame and repeat the process of Cropping.



CLIP BOARD lets you perform a small miracle on your enlarged work using the special feature called the OPTIMIZER. Make your choice in the Vertical Menu and press RETURN to active ("Y") or deactivate ("N") the OPTIMIZER. To better understand exactly what the OPTIMIZER does, read the section "THE INCREDIBLE OPTIMIZER" in this manual.

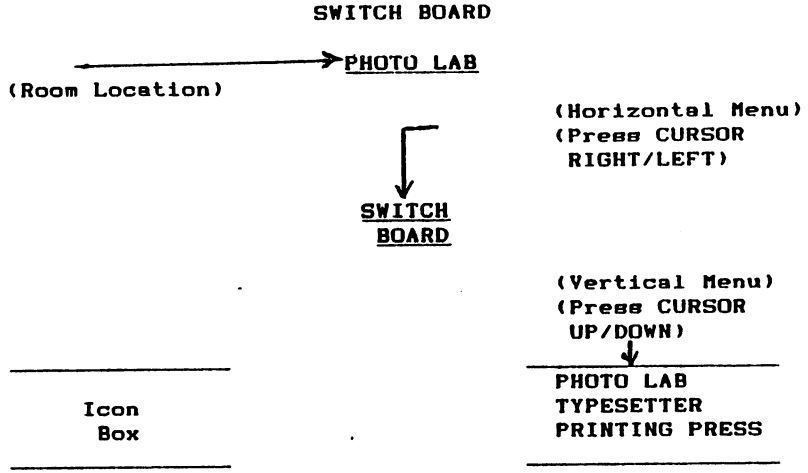
DOS COMMANDS: This function is accessed by pressing RETURN after selecting the option from the Vertical Menu. At that point you will be able to enter the command you require on the bottom of the screen. You DO NOT NEED QUOTES. They are automatically supplied by the system. ALL STANDARD 1541 DOS COMMANDS ARE SUPPORTED. (Check your Commodore 1541 Users' Manual for a complete list of DOS Commands.) In addition to the standard 1541 DOS Commands, CLIP BOARD provides a few others. Pressing RETURN without entering any command will read the error channel and report the drive status. Entering a $ and pressing RETURN at the command line will display the directory of the current disk. The listing can be suspended by pressing the SPACE BAR (pressing ANY key will cause the directory listing to continue), or aborted entirely by pressing the RUN/STOP key. And finally, entering "EXIT TO BASIC" and pressing RETURN will end the program and return you to BASIC.

FORMAT: This allows you to save the current picture in memory OR save an enlarged section file under the same ID. Sound confusing? Well, let's examine how BILLBOARD MAKER saves its files. If you wish to simply save the picture that is in memory in its standard size, you

would select FORMAT: and press RETURN so that ORIG appears alongside the FORMAT: selection. Any save you perform now will create a standard sized picture file of the picture in memory. If you wish to enlarge the original, you MUST select FORMAT: and press RETURN so that ID appears alongside FORMAT:. Make sure that the POSTER BOARD selection has been set to the size you desire. When you decide to perform the actual SAVE, BILLBOARD MAKER will already be set to save the enlargement of the original picture.

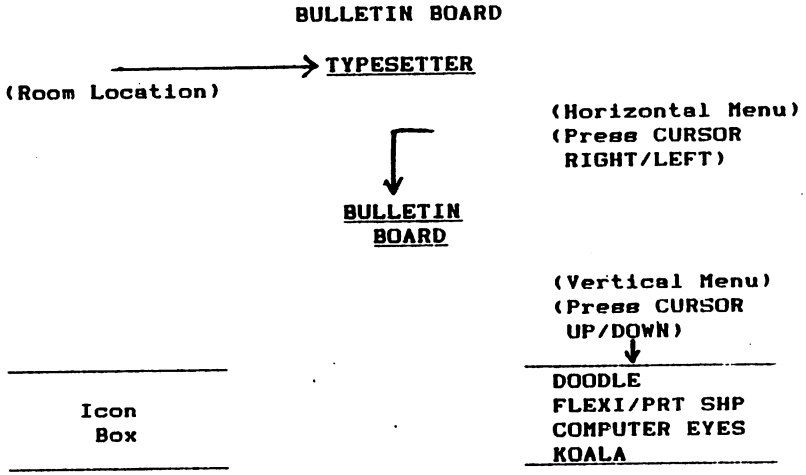
SAVE: This function allows you to save your picture to disk in its standard or enlarged form, depending on what appears after FORMAT:. BILLBOARD MAKER will now request the filename yo wish to save the picture under. If you wish to abort the SAVE, delete everything between the quotes and press RETURN. Remember the BULLETIN BOARD choice you have already selected? If you changed that selection to a different picture format than the one that the picture in memory is of (eg: you loaded a DOODLE picture but have changed the BULLETIN BOARD selection to FLEXI), the picture file created will be in the format you have already selected. NOTE: When saving a picture in Koala Pad/Super Sketch format, please be aware of the following. When you set the format to ORIG, the filename must be extended to the end (15 characters long). Enter the name you wish to save the picture under then hold down the SPACE BAR until the right hand quote stops moving, then press RETURN to save. If you accidentally erase the spade character (this character is required in order for the Koala Pad and Super Sketch to recognize the picture) you can recreate it by holding down the Commodore key and pressing the numeric 1 key. Remember that deleting all characters inside the quotes then pressing RETURN will allow you to escape the Save mode and return you back to the menu.

If you have activated the OPTIMIZER, saving will take longer than with it deactivated. You will be able to watch the OPTIMIZER in action as it smooths out the enlargement! For more hints, see the CONVERSION TECHNIQUES section.



SWITCH BOARD: This feature allows you to access another room in BILLBOARD MAKER. Simply select the room you with to go to in the Vertical Menu and press RETURN to bring you there. It couldn't be easier!

NOTE: When using the SWITCH BOARD, you will lose the font in the TYPESETTER or the ID file in the PRINTING PRESS.

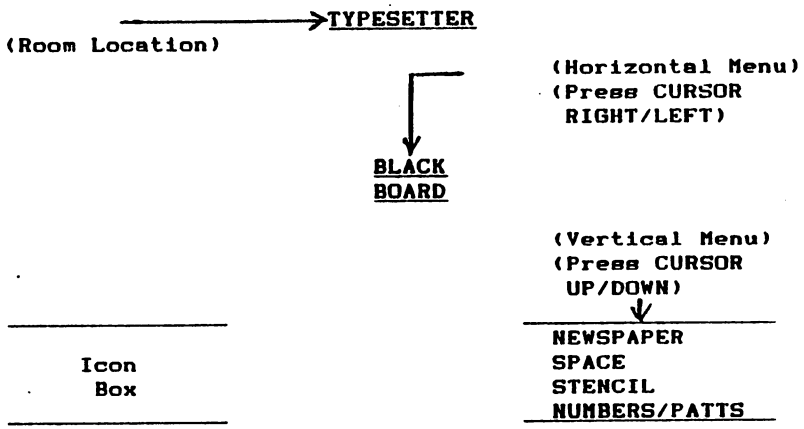


BULLETIN BOARD allows you to load a pre-drawn picture file into BILLBOARD MAKER. By using the CURSOR UP/DOWN keys to move across the Vertical Menu, you can choose the product that was used to create the picture. Press RETURN to make a selection and prompt in the Icon Box will request that you put the appropriate disk in the disk drive. After the disk has been put in the disk drive, press RETURN again and BILLBOARD MAKER will look on the disk for all files that were created by the product you had specified in the Vertical Menu. The files found will be displayed on the bottom of the menu one at a time. In order to look at the name of each picture file, press the CURSOR DOWN key. When you finally reach the picture you wish to load, simply press RETURN and the system will load the picture into memory. The picture will be displayed and there will be a prompt at the top of the picture stating SET ORIG. At this point you must answer with a "Y" or "N." If you answer "Y" the picture becomes permanent in memory and becomes your working copy. If you answer "N" the picture will be erased and whatever was in memory prior to the load will remain. You can use this feature to check different pictures on the disk without losing the working copy you have in memory.

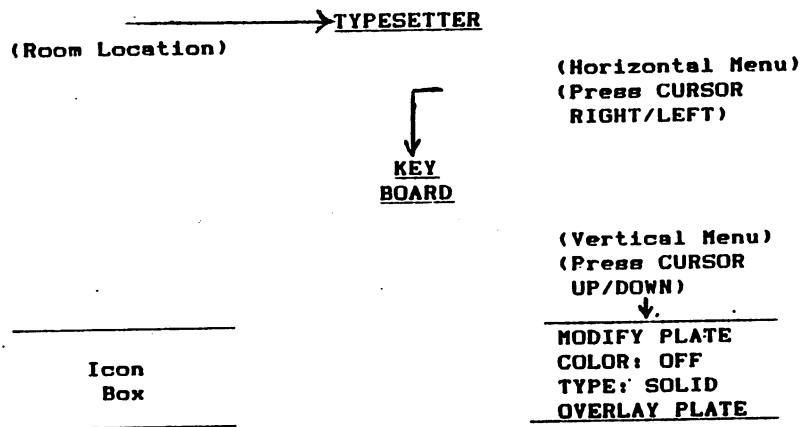
NOTE: Attempting to load a picture file will erase both the current font and the overlay plate in memory.

While accessing ANY menu in the TYPESETTER, holding the CTRL key down and pressing the F key allows you to make a Font from your Layout Plate. The screen border will

turn Green and will allow you to access the Modify Plate choice. Using this feature along with the Up Arrow key permits you to create exciting three-dimensional effects. Use your imagination and take some time to fully understand this feature.



TYPESETTER: The Vertical Menu now offers you a selection of different Fonts to overlay your working copy. As usual, position the cursor in the Vertical Menu with the CURSOR UP/DOWN keys. After you make your selection press RETURN and the font style you selected will be loaded into memory. (NOTE: be sure the program disk is in the drive, since that's where the font files are.) When a Font is successfully loaded, the border of the screen will turn Green. Remember that you can use different fonts on the same picture. Mix and match the styles in your own creative way! The FONT DISK option is provided for future Font Disks. See the AMAZING TYPESETTER section of this manual for more information.



KEY BOARD: The KEY BOARD offers you the ability of creating attractive signs and effects that are totally under your control. Check the AMAZING TYPESETTER section of this manual for techniques that will enhance your pictures. For now, though, let's take a look at its primary functions.

MODIFY PLATE: (NOTE: the border must be GREEN to access.) After having loaded the necessary Font, the MODIFY PLATE choice will allow you to work with that font. The MODIFY PLATE section of the TYPESETTER works with two Plates: the Font Plate and the Layout Plate. When you select the MODIFY PLATE and press RETURN, you will be sent to the Font Plate. There you will see the letters or patterns you have selected for use. The Capture Box will appear in the center of the screen. The size of the Capture Box can be changed by pressing the F1, F3, F5, and F7 keys. Position the Capture Box over the letter or pattern you wish to select by using the CURSOR UP/DOWN and CURSOR LEFT/RIGHT keys. When you have completed the selection, press RETURN and the Capture Box will pick up the letter and move you to the center of the Layout Plate. Again, using the CURSOR keys, position the letter where you want it and press RETURN to place it down. If you press the "T" key, all placements will be in the TOGGLE mode. That is, when placing a letter, anything under the letter will be erased when it is placed down. If you press the "P" key, you will be in the PERMANENT mode. In the PERMANENT mode, the placement of the letter will be directly on top of whatever is there. Try it out to see

the difference! You can change the Grid Lines that appear over the Layout Plate by pressing the number keys 1, 2, and 3. This grid is provided to assist you in accurately placing the letters. When the number "1" is pressed, the Grid that appears reflects a picture that is to be printed using the STANDARD PRINT DUMP. When the number "2" is pressed, the Grid that appears reflects one piece of a picture that is to be printed using the SIGN SIZED DUMP. When the number "3" is pressed, the Grid that appears reflects one piece of a picture that is to be printed using the MURAL SIZED DUMP.

There are some additional keys active while working on the Layout Plate that allow more control over your art work. The "I" (up), "M" (down), "J" (left), and "K" (right) keys will allow you to move whatever is in the Capture Box one pixel in the direction noted. This feature will allow you to more accurately space your art work. If you hold the SHIFT key while pressing any one of the four keys, the entire Layout Plate will move one pixel in the direction noted. Holding the COMMODORE key while pressing any one of the four keys will move the entire Layout Plate will move eight pixels in the direction noted. Pressing the DELETE key will erase anything under the Capture Box. Pressing the SHIFT CLR key will erase the entire Layout Plate. In addition, you can view the ORIG picture in memory by pressing the F8 (SHIFT F7) key. This is handy for checking placement of text over your original before completing the overlay process. (The F8 key acts as a toggle key between the ORIG and the Layout Plate.) The last key that will create the most incredible effects it the UP ARROW key (the key directly to the left of the RESTORE key). This key exchanges the Font Plate and the Layout Plate. For more information on this and the CTRL F process, see the AMAZING TYPESETTER section of this manual.

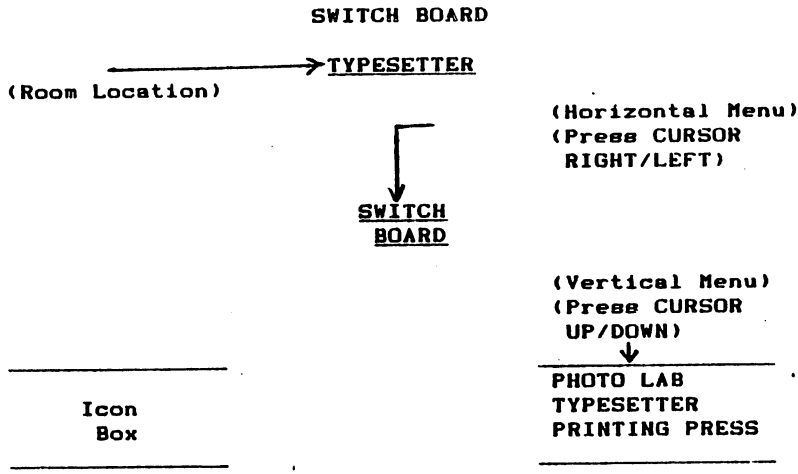
To return to the Font Plate from the Layout Plate press Q. From the Font Plate you can return to the Menu by similarly pressing Q.

COLOR: After making this selection, simply press RETURN to change to the color required. COLOR: OFF tells BILLBOARD MAKER to use the color of the picture as the letter or pattern color. NOTE: ALL other color choices default the entire picture to the color of the overlay text.

TYPE: By pressing RETURN when this function is selected, you can chose the format of the letter that will be placed on your original when you use the OVERLAY PLATE function: SOLID, HOLLOW, or SHADOW.

OVERLAY PLATE: After selecting this choice from the Vertical Menu, BILLBOARD MAKER will blank the screen, take the Layout Plate and place it on top of the Original. When the process is completed, you will be shown your new creation and asked if you with to SET ORIG. If you respond with "Y" you will create a new Original. If you respond with "N" the Overlay will NOT become permanent and you can return to the MODIFY PLATE option to make corrections.

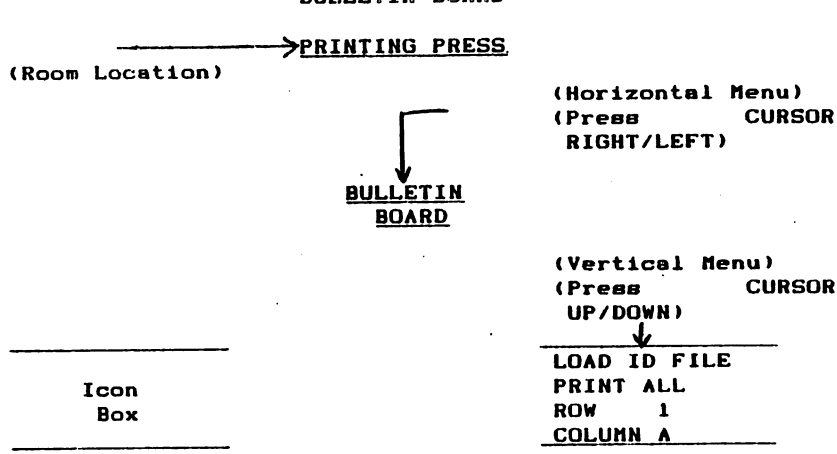
To better understand the power of these features we suggest that you play with the KEY BOARD section of the TYPESETTER. The KEY BOARD section does not place any restrictions on what your Layout will look like. It allows you FULL CONTROL of the art you are developing!



SWITCH BOARD: This feature allows you to access another room in BILLBOARD MAKER. Simply select the room you wish to go to in the Vertical Menu and press RETURN to bring you there.

THE PRINTING PRESS

THE PRINTING PRESS



BULLETIN BOARD: This function allows you to load an ID Control File into BILLBOARD MAKER. The BULLETIN BOARD in the PRINTING PRESS loads ONLY the ID Control File generated by the enlargement process. If you have chosen an enlargement and selected the ID function of FORMAT, the filename you entered during the SAVE is your ID Control File. This ID Control File filename is the one you enter in order to print the enlargement on your printer.

After inserting the correct disk in the disk drive, press RETURN and BILLBOARD MAKER will look on the disk for all ID Control Files that were created by BILLBOARD MAKER. The files found will be displayed on the bottom of the menu one at a time. IN order to look at them, press the CURSOR DOWN key. When you finally reach the ID Control File you want, press RETURN and the system will load the ID Control File into memory. YOU CANNOT VIEW AN ID CONTROL FILE. This file is used by BILLBOARD MAKER to load appropriate sections of the enlargement and link those pictures correctly for proper printer output. See CONVERSION TECHNIQUES in this manual for further information.

After BILLBOARD MAKER loads the ID Control File, the screen boarder will change to purple and will move to the CIRCUIT BOARD automatically. The purpose for the PRINT ALL selection is to allow you to print the entire picture (ALL) or one of the enlargement's sections (ONE). Make your choice in the Vertical Menu and press RETURN.

If you have chosen to print only ONE section of the picture, you can select the ROW and COLUMN of the enlargement's section to be printed. BILLBOARD MAKER maintains its enlargement files in the following manner:

The SIGN size saves as follows:

Each section of the enlargement becomes its own file. Therefore, if "filename" is the name you assigned it:

```
Section 1 = filename   1A
Section 2 = filename   2A
Section 3 = filename   1B
Section 4 = filename   2B
ID Control File = filename
```

When selecting a particular section for printing, use the following diagram as a guide to determine its row and column:

```
          COLUMN A  COLUMN B  COLUMN C  COLUMN D

ROW 1     Section 1 Section 2

ROW 2     Section 3 Section 4

ROW 3

ROW 4
```

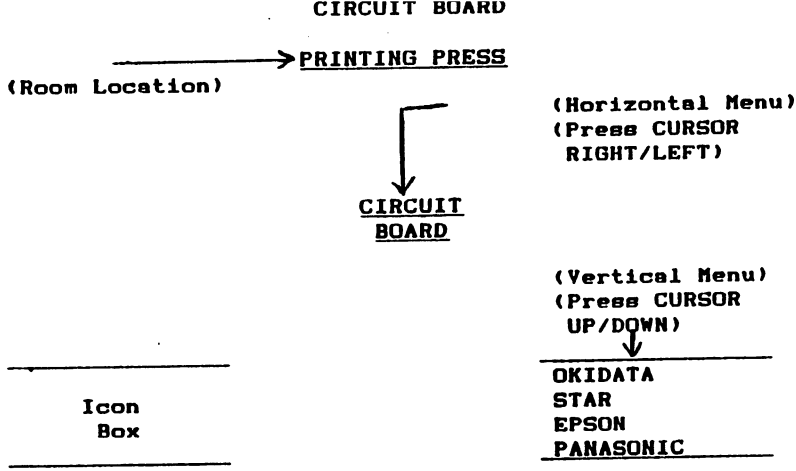
In a mural size, the same rules apply for the naming of section. Again, if "filename" is the name you assigned it:

```
Section  1 = filename   1A
Section  2 = filename   1B
Section  3 = filename   1C
Section  4 = filename   1D
Section  5 = filename   2A
Section  6 = filename   2B
Section  7 = filename   2C
Section  8 = filename   2D
Section  9 = filename   3A
Section 10 = filename   3B
Section 11 = filename   3C
Section 12 = filename   3D
Section 13 = filename   4A
Section 14 = filename   4B
Section 15 = filename   4C
Section 16 = filename   4D
```

Similarly, the diagram of sections would be as follows:

	COLUMN A	COLUMN B	COLUMN C	COLUMN D
ROW 1	Sect. 1	Sect. 2	Sect. 3	Sect. 4
ROW 2	Sect. 5	Sect. 6	Sect. 7	Sect. 8
ROW 3	Sect. 9	Sect. 10	Sect. 11	Sect. 12
ROW 4	Sect. 13	Sect. 14	Sect. 15	Sect. 16

The final output when printing an enlarged work will be on standard 8 1/2" by 11" paper. The Sign size will be made up of two strips of two connected pictures. Cut the excess paper from under the first strip, then align this strip to the top of the second strip. When assembling a Mural size picture, you will have a total of four strips of four connected pictures. The bottoms of the top three strips must be cut and each strip aligned to the other.



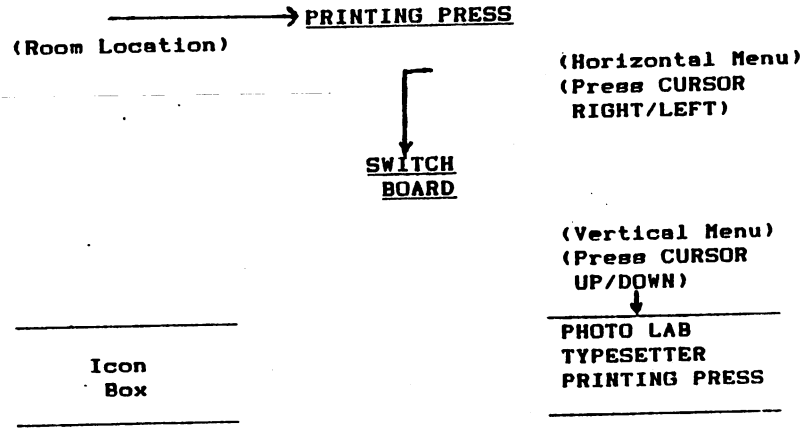
CIRCUIT BOARD: This function provides the ability to select the type of printer you are using. This choice is made using the CURSOR UP/DOWN key.

If you have selected an ID Control File in the BULLETIN BOARD section of the PRINTING PRESS, you will begin to print the enlargement when you press RETURN. This enlargement printing will automatically show you the section to be printed on the screen while the printer recreates the image. All linking of enlarged sections is done AUTOMATICALLY. Depending on your enlargement SAVE, the printer will create either two strips of two connected picture sections or four strips of four connected picture sections. Printing can be ABORTED at any time by pressing the RUN/STOP key. A special feature has been added to make a quick standard dump of a picture. If you have made NO ID Control File selection from the BULLETIN BOARD section of the PRINTING PRESS, you can simply press RETURN and the printer will print a standard sized dump of your working copy (the picture in memory that you've been working on). This is handy to check you shading and new creative art work before using the enlarging process!

NOTE: DO NOT OVERWORK YOUR PRINTER!! Pressing the SPACE BAR during the printer dump will pause the printing and allow a cooling down of the printer head. When you are ready to continue, press the SPACE BAR again and the printer will continue exactly where it left off! Remember: the printer works hardest on high density output (large amounts of dark areas in the

picture). On some printers a thermal protection device will stop the printing until the heat is reduced. The program will wait for the printer to cool down and WILL NOT CRASH! Please read the PRINTER CARE section of this manual for further advice.

IMPORTANT NOTICE: Because of the mechanics of the Commodore 1525 printer, the 1525 is not capable of the special manipulation BILLBOARD MAKER employs to link pictures. Since the BILLBOARD MAKER program leaves extremely little free memory, a separate printout utility is provided to print enlarged pictures. (Standard sized pictures may be printed from within BILLBOARD MAKER.) For any other user experiencing printing difficulties, the fault may lie in the interface you are using. You too will be able to output enlarged pictures properly by using the separate printout utility. For a full explanation of its features and operation, see the BILLBOARD MAKER PRINTER UTILITY section of this manual.



SWITCH BOARD: This feature allows you to access another room in BILLBOARD MAKER. Simply select the room you wish to go to in the Vertical Menu and press RETURN to bring you there. Remember, when using SWITCH BOARD in the PRINTING PRESS, you will lose the ID Control File.

THE INCREDIBLE OPTIMIZER

When BILLBOARD MAKER was originally conceived, the enlargement process created a drastic effect. But, still, our staff felt the need to improve on this capability. Graphic representation of a computer picture on a dot matrix printer has always been in the STANDARD SCREEN DUMP style. The picture in memory was reproduced by the printer pixel (dot) by pixel. Well, as you know, BILLBOARD MAKER enlarges your computer art and allows you to create your own "Billboards." When a computer picture is magnified, each pixel on the screen is multiplied by the size factor used to create the enlargement. In the case of a SIGN SIZE enlargement, your original picture is magnified to four times its original size. BILLBOARD MAKER divides the original into four sections, then takes each pixel in each section and creates four pixels for every one found. After the enlargement process is complete, each of the four sections is saved to the disk as its own picture file in the format you have chosen. BILLBOARD MAKER automates the enlargement process, the saving of the files, and the print linking for you. This was still not enough to make this product incredible! Each section of the enlarged picture could still be improved upon. After each pixel from the original has been multiplied by four, there is room to put additional pixels in the picture to SMOOTH the lines and designs of the drawing. Taking what has been drawn by you and enhancing the enlarged results is the function of the OPTIMIZER. You can now view your enlargement from up close and far away. The logic of the OPTIMIZER was a major feat in itself. In order to process an enlargement with the OPTIMIZER, set the OPTIMIZER to "Y" and proceed with the enlargement process. The OPTIMIZER will take each enlarged section of the picture and, moving from left to right, calculate the position of a pixel and the coordinates available to add additional pixels to enhance the art. The OPTIMIZER has been designed to take fill patterns and details into consideration and will NOT over optimize your picture. Due to the complexity of the job the OPTIMIZER performs, it will take a little time to optimize an enlarged picture. Considering the almost impossible task of performing this function by hand, it is well worth it! For those of you who wish to bypass the OPTIMIZER, set the OPTIMIZER function to "N" prior to doing your SAVE. The OPTIMIZER <u>WILL NOT WORK</u> with multi-color pictures due to the un-uniform way the various multi-color graphics programs create their images.

THE AMAZING TYPESETTER

The TYPESETTER is an amazing room in the BILLBOARD MAKER system. In it you will be able to create overlays with the available fonts, patterns, and icons on the BILLBOARD MAKER disk. The TYPESETTER does not assume positioning, but, rather, allows you to adjust your Layout to the exact position you require! It offers you three grid guides to assist you in your layout, micro and macro movement of your entire Layout Plate, and micro movement of the text in your Capture Box. With these tools, you can create your overlay with a degree of exactness never before available. You can flip between your layout and your original picture to check positioning BEFORE making it permanent. By using the many features of the TYPESETTER, you can create a seemingly infinite range of effects that are all under your control Remember, we will be releasing new Fonts, Icons, Patterns, and Frames to be used with your BILLBOARD MAKER system. The best is yet to come!

PRINTER CARE

A word of caution regarding your printer. Please DO NOT mistreat your printer by excessive printing of BILLBOARD MAKER output. Check your reworked art by making a STANDARD SIZE dump of it BEFORE printing the enlargement! After checking this output, make any adjustments using BILLBOARD MAKER or the graphic product you may have used to create it. When you are TOTALLY satisfied with the picture, THEN produce the enlargement.

Always have a few formatted blank disks around to save your art work. You do not want to run out of space on a disk during the enlargement process! Remember, SIGN SIZED enlargements take approximately 160 blocks of disk space! BILLBOARD MAKER has been designed to be completely automatic. You can therefore insert your blank disk, start up the enlargement process, and let the program run automatically. The same holds true for printing, BUT BILLBOARD MAKER has NO way of knowing whether the paper is jammed, not feeding correctly, or if any other printer-related problem has ocurred. It is also advised that the printer be stopped by PRESSING THE SPACE BAR occasionally to allow the print head to cool down, especially during any enlarged print dump. Printing can be aborted by pressing the RUN/STOP key at any time. BE SURE THE LINE FEED SWITCH ON YOUR PRINTER INTERFACE IS TURNED OFF (if you are NOT using a Commodore-brand printer). BILLBOARD MAKER controls the printer, and the wrong line feed setting will affect the picture linking process. After printing your work, it is advised that you turn the printer OFF, then ON again in order that the TOP OF FORM control is returned to the printer.

There are a few things you should know about picture formats. Any computer picture will be either MULTI-COLOR or HI-RES. Since there are some major differences in these two formats, many of BILLBOARD MAKER's operations do not function the same (or at all) on either format:

STRIP COLOR and NEG. IMAGE DO NOT WORK on MULTI-COLOR pictures.

NEG. IMAGE works best on HI-RES pictures that have had their COLOR STRIPPED.

You can save a HI-RES COLOR STRIPPED picture to a MULTI-COLOR picture format successfully.

BUT, saving a MULTI-COLOR picture to a HI-RES COLORED picture (OR VICE-VERSA) will yield POOR results.

The following is a table of graphic programs and the type of picture they produce:

HI-RES PRODUCTS:	MULTI-COLOR PRODUCTS:
DOODLE	KOALA PAD
COMPUTER EYES	ANIMATION STATION
FLEXI-DRAW	BLAZING PADDLES
PRINT SHOP (Screen Magic)	SUPER SKETCH
BILLBOARD MAKER	BILLBOARD MAKER

ADDITIONAL PROGRAMS ON BILLBOARD MAKER DISK

CONTROLLER BOARD

Although CONTROLLER BOARD is not on the BILLBOARD MAKER menu, it is your link to using your graphic pictures in your own BASIC and machine language programs! If you wonder how BILLBOARD MAKER can display ALL types of picture file formats so easily then we should explain something about your pictures. A hi-res picture contains 8k of bit map data and a color hi-res picture contains an additional 2k of color data. A multi-color picture is made up of all of the hi-res information plus an additional 2k of color data and one byte for the screen color. What BILLBOARD MAKER does is convert all three situations into one uniform block that contains all of this information. Once in this uniform format it is extremely easy to display any picture. BILLBOARD MAKER creates a picture in this uniform format using the BILLBOARD MAKER file option in BULLETIN BOARD. Once you SAVE a picture in this format, you are eligible to use the CONTROLLER BOARD program to display the picture in your own programs.

CONTROLLER BOARD is a simple machine language program that has four options:

1. LOAD a BILLBOARD MAKER picture file.

2. DISPLAY a picture.

3. TURN OFF the picture being displayed.

4. SAVE the CONTROLLER BOARD program to disk.

To better explain how to use the CONTROLLER BOARD program, we will walk you through an example.

Insert your BILLBOARD MAKER disk in the disk drive and type:

```
LOAD "CONTROLLER BOARD",8,1
```

and press RETURN.

After the program is loaded, type "NEW" and then press RETURN. Now, enter and run this program and watch what happens!

```
10 A$ = "MY PICTURE" : REM  Set A$ to the picture file
20 SYS 49152 : REM Load picture using variable last set
30 SYS 49155 : REM Turn on (DISPLAY) the picture
40 GET B$:IF B$ = "" THEN 40:REM Wait for a pressed key
50 SYS 49158 : REM Turn off the picture
```

```
60 END
```

That should get you started. Remember, the file you use MUST be a BILLBOARD MAKER picture file. To SAVE the CONTROLLER BOARD program onto another disk, type SYS 49161 after it has been loaded into memory.

The following information is provided for you machine language hackers out there!

A BILLBOARD MAKER file starts at the address $5800.

The memory map of the picture is as follows:

$5800 - $5BFF	Extra color memory
$5C00 - $5FFF	Color memory
$6000 - $8000	Bit map
$7F40	File type byte (0 = Hi-res/1 = Multi)
$C000 - $C600	CONTROLLER BOARD program

Provided on your BILLBOARD MAKER disk is a program called PRINTER UTILITY. Its purpose is to print any picture saved through BILLBOARD MAKER that includes a BILLBOARD MAKER ID File. This would include standard sized pictures, as well as sign sized and mural sized enlargements. To use this program, at the Commodore BASIC "Ready" prompt type LOAD "PRINTER UTILITY",8,1 and press RETURN. The program will load and begin execution. The program has three main menus: DISK OPERATIONS, OUTPUT SETUP, and PRINTER SELECTION.

DISK OPERATIONS: All DISK OPERATIONS options are selected by moving the cursor to the desired option and pressing RETURN.

- LOAD ID FILE: This option will prompt you for the name of the ID File to load. Type it in and press RETURN. The program will then check to make sure that what you have typed in is a valid ID File. If so, it will load in the ID File and display its name on the screen. NOTE: When loading an ID file, you CANNOT use DOS wildcards. For instance, you may NOT specify "? PIC A*" for an ID Filename. You can achieve the spade character for Koala and Super Sketch pictures by holding the Commodore key and pressing the numeric 1.

- DOS COMMANDS: This option will prompt you for a DOS Command. ALL standard 1541 DOS Commands are supported. Consult your 1541 Disk Drive Manual for further information. Enter the DOS Command and press RETURN. NO quotes are necessary as the program provides them for you. Pressing RETURN without entering any command will read the disk drive's error channel.

- DIRECTORY: When this option is selected, the screen will clear and the directory of the disk in the disk drive will appear on the screen. To pause the directory, press the SPACE BAR. To restart the directory listing, press any other key. Press the RUN/STOP key to abort the directory listing.

- OUTPUT SETUP: To select the option from this menu, move the cursor to the option and press RETURN.

- MODIFY SETUP: When this option is selected, the screen will change to a map of the picture's output. By using the four Function Keys, you can select which section or adjacent sections of the current picture will be printed. The map will contain all possible picture sections. For example, a standard sized picture will

only show one section, a sign sized picture will show four sections, and a mural sized picture will show sixteen sections. The program will highlight the sections that are going to be printed. Upon loading each picture, the program highlights ALL sections of the picture depending on its size. You, though, may change the number of sections that are to be printed by using the Function Keys. The F1 and F3 keys control the START PICTURE section: F1 decreases the section value and F3 increases it. Similarly, the F5 and F7 keys control the END PICTURE section: F5 decreases the section value and F7 increases it. The program will ONLY print out ADJACENT picture sections. If you want to print out non-adjacent picture sections, you must adjust the map to print the first section or sections, then readjust the map to print the second section or sections, and so forth until all of the desired sections are printed. The program, like BILLBOARD MAKER, will print your enlarged pictures in strips to minimize cutting and splicing. It will do so even if you do not print an entire row of a picture. For example, the current picture is a mural sized picture. You do not want to print the entire picture, but, instead, want only the last three sections of the first row, the first section of the second row, and the first two of the third row. To accomplish this, you must adjust the map to highlight only the first three sections of the first row and the first section of the second row. You will then print that group of sections. (The program will connect the first three picture sections, then will insert a space between the last section and the next section since it begins a new row.) After the printing is completed, you must readjust the map to highlight only the last three sections of the first row. You will then print that group of sections. They, too, will be connected.

* PRINTER SELECTION: After selecting the appropriate printer, press RETURN. The program will prompt you to insert the disk containing the picture to be printed. At this point, the program will begin printing the picture section or sections that you highlighted in the MODIFY SETUP picture map.

If you have been experiencing printing difficulties using the BILLBOARD MAKER program, this utility should clear them up! Simply select your printer as explained and print the picture. If you STILL cannot print the picture properly, try setting your interface to Commodore 1525 emulation mode and select the 1525 option. Be aware that the printing process will take longer when your interface is in 1525 emulation mode.

FLEXI-TO-DOODLE

This program will convert a Flexidraw COLORED picture to a DOODLE picture. To use the program, at the Commodore BASIC "Ready" prompt type LOAD "FLEXI-TO-DOODLE",8 and press RETURN. After the program finishes loading type "RUN" and press RETURN. The program will then begin execution.

The program will prompt you for the name of the Flexidraw picture. After entering its filename, press RETURN. The program will search for the picture. If the file is not on the disk, the program will notify you with a "DISK ERROR!" message. If the file is there, it will be loaded and displayed for you. Press any key to return to complete the conversion process. You will then be prompted to enter the DOODLE filename. The program provides you with DOODLE's required "DD" filename prefix, though you may delete this if you'd like. After entering the filename, press RETURN. The DOODLE format picture will then be saved and the program will restart itself. To exit the program press the RUN/STOP and RESTORE keys simultaneously.

Remember that the BILLBOARD MAKER program resides in memory at ALL times. The only need to put in the BILLBOARD MAKER disk during operation of the program is to load the frames or fonts you wish to use. The following table of keys will help you get started using the system very quickly:

ON SCREEN:	KEYS:	OPERATION PERFORMED:
ALL MENUS	CURSOR UP	Move up vertically
ALL MENUS	CURSOR DOWN	Move down vertically
ALL MENUS	CURSOR LEFT	Move left horizontally
ALL MENUS	CURSOR RIGHT	Move right horizontally
ALL MENUS	SHFT CLR/HOME	View original
ALL MENUS	RETURN	Execute menu selection
ALL MENUS	CONTROL S	Toggle sound on/off

In the TYPESETTER section:

MENU	CONTROL F	Makes the Font Plate equal the Layout Plate
FONT PLATE	F1, F3, F5, F7	Change Capture Box size
FONT PLATE	CURSOR KEYS	Move the Capture Box
FONT PLATE	RETURN	Picks up a letter and move to the Layout Plate.
LAYOUT PLATE	F1, F3, F5, F7	Change Capture Box size
LAYOUT PLATE	CURSOR KEYS	Move the Capture Box
LAYOUT PLATE	RETURN	Put down the contents of the Capture Box

The following affect the contents of the Capture Box:

LAYOUT PLATE	I	Move the contents up
LAYOUT PLATE	M	Move the contents down
LAYOUT PLATE	J	Move the contents left
LAYOUT PLATE	K	Move the contents right

The following affect the Layout Plate by one pixel:

LAYOUT PLATE	SHIFT I	Move the plate up
LAYOUT PLATE	SHIFT M	Move the plate down
LAYOUT PLATE	SHIFT J	Move the plate left
LAYOUT PLATE	SHIFT K	Move the plate right

ON SCREEN:	KEYS:	OPERATION PERFORMED:
The following affect the Layout Plate by eight pixels:		
LAYOUT PLATE	COMMODORE I	Move the plate up
LAYOUT PLATE	COMMODORE M	Move the plate down
LAYOUT PLATE	COMMODORE J	Move the plate left
LAYOUT PLATE	COMMODORE K	Move the plate right
The following affect the Grid Size on the Layout Plate:		
LAYOUT PLATE	1	Set the grid to STANDARD
LAYOUT PLATE	2	Set the grid to SIGN
LAYOUT PLATE	3	Set the grid to MURAL
LAYOUT PLATE	↑	Overlays the Overlay Plate onto the Font Plate and stores the results in both.
LAYOUT PLATE	SHFT CLR/HOME	Clear the Layout Plate
LAYOUT PLATE	DEL	Erase what is under the Capture Box
LAYOUT PLATE	T	Toggle mode
LAYOUT PLATE	P	Permanent mode
LAYOUT PLATE	Q	Return to the Font Plate from the Layout Plate
FONT PLATE	Q	Return to the KEY BOARD from the Font Plate

Try some of the following neat effects!

Place a pattern down on the Layout Plate then Micro-shift the entire Layout Plate a few pixels. Place the Capture Box in Permanent Mode ("P") and type over the pattern.

Move the letter in the Capture Box so that only a small portion can be seen. Use this for borders.

Clear the Layout Plate and press the UP ARROW. You now have the entire font on both the Font Plate and the Layout Plate. Micro Move the Layout Plate two down and three to the right. Now press the UP ARROW key again and watch what happens!

Overlay the ORIGINAL, then go back to the Layout Plate. Macro Move the plate to another position and Overlay the ORIGINAL again.

Overlay the ORIGINAL. Go to the IRONING BOARD in PHOTO LAB and FLIP INVERT the picture. Now return to the OVERLAY PLATE function and repeat the Overlay procedure.

Add text to each section of your enlargement!

Each section of your enlargement can be altered using DOODLE, FLEXIDRAW, KOALA PAD, etc. Load the section into the appropriate graphic program and add details such as bark on trees, veins in leaves, or blades of grass. This will give your enlargement a very professional look!

ATTENTION FLEXIDRAW OWNERS: You can run the utility program "FLEXI-TO-DOODLE" on the BILLBOARD MAKER program disk to combine the black and white color files of the FLEXIDRAW format. This routine will convert the FLEXIDRAW color picture into a single DOODLE color picture to be loaded into BILLBOARD MAKER as a DOODLE picture.

Always have a few blank formatted disks to work with!

Print the ORIGINAL with the STANDARD dump to check out your art work BEFORE enlarging it!

STANDARD size pictures can be saved with the ID format and can be auto printed with the ID FILE option in BULLETIN BOARD of PRINTING PRESS. This way you can print a picture file without loosing the working copy in memory.

HEY ALL YOU ARTISTS!

If you feel you can create a Font, Icon, or Frame for BILLBOARD MAKER, draw the image, convert it into a BILLBOARD MAKER picture format, and send it to us at:

Solutions Unlimited, Inc.
P.O. Box 177
Dobbs Ferry, NY 10522-0177

We will review it and, if we like it enough to use it on one of our Font/Frame disks, you will be rewarded with a $20 check or a free copy of the Font/Frame disk it appears on! Of course, you will receive full credit for your masterpiece.

When creating an Icon/Font (ALL 26 letters of the alphabet PLUS punctuation AND numbers, please!), use your best judgement in size and spacing. Our staff artists will do the actual layout if we use it.

When creating a hi-res Frame, draw it in the first fifteen pixels from the edge of the screen on top, bottom, left, and right. Put a border line in the sixteenth pixel area from the edge of the screen. If it is a multi-color Frame, use the same fifteen pixel area on the top and bottom of the frame, but use ONLY a seven pixel area from the left and right edges of the screen. For a border line, use the sixteenth pixel area from the top and bottom edges of the screen and the eighth pixel area from the left and right edges of the screen.

Sorry, but we CANNOT return your diskette, which will become the property of Solutions Unlimited, Inc. However, if you include a self-addressed, stamped envelope, we'll be happy to drop you a line concerning the status of your creation!

We're looking forward to the ULTIMATE Fonts/Frames for the ULTIMATE graphic utility BILLBOARD MAKER.

NEWSPAPER

SPACE

STENCIL

1234

SOLID

HOLLOW

SHADOW

AND INFINITELY MORE!!!