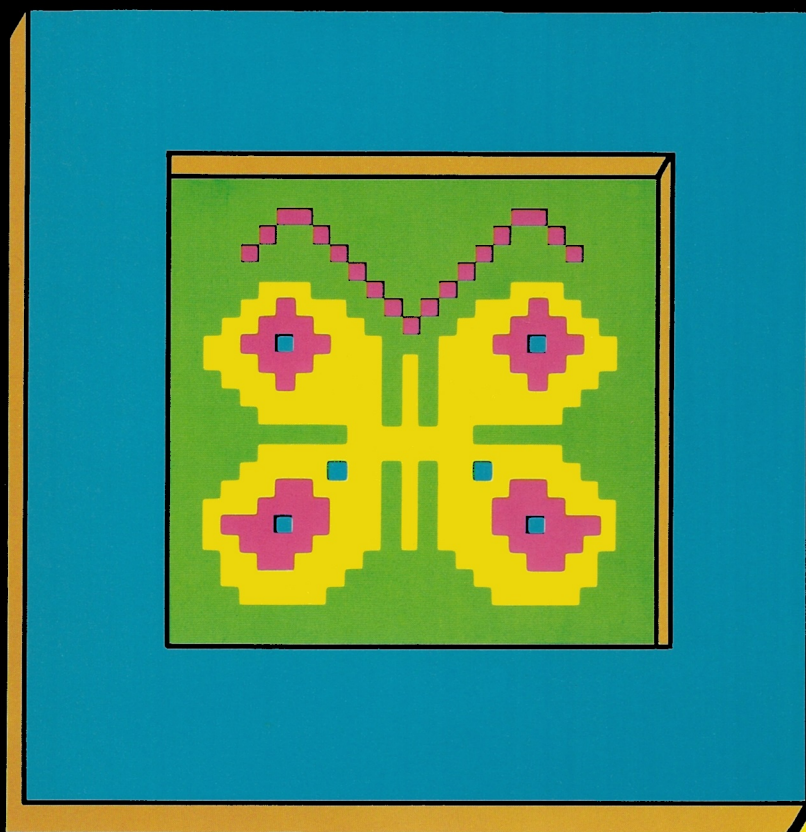


ART GALLERY™



CAT. NO. 26-3061

Radio Shack

TRS-80



**COLOR
COMPUTER**

™

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Art Gallery™

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Introduction

You now have the opportunity to utilize your artistic talents without the mess of paints and bother of stretching canvas. Art Gallery gives you the freedom to create pictures with your video display as the canvas, the keyboard as your palette, and the cursor as your brush.

Leonardo da Vinci, Vincent van Gogh, and Henri Matisse would surely be jealous if they could see you using your Color Computer to create masterpieces. And your art can be preserved in your own personal art gallery – in the form of a cassette tape.

For those with a 4K or 16K Color Computer, Art Gallery lets you draw color images on the screen and save them on tape for later touchups and viewing. (You do not have to have a cassette recorder to use Art Gallery, but you cannot save art for later viewing without one.) You can also type block letters in the size you choose and view those later.

Also, if you have a 16K Color Computer you have a text editing screen, where you type text in your choice of size and then have it scroll horizontally or vertically. If you have drawn a picture in the DRAW OR CHANGE PICTURE section, the message you write in EDIT TEXT AND CONTROLS will be scrolled across the picture. This way you can make graphics with captions for public or private presentations. These presentations can be stored on tape and shown later.

Loading the Program

First, make sure the cassette recorder is connected properly. Turn on your TV and insert the cartridge in the slot in the right side of the computer. Now turn the computer on by pressing the On/Off button at the left rear of your color computer and the Art Gallery Menu shows:

```
A R T G A L L E R Y
(C) R.G. KILGUS 1981
LICENSED TO TANDY CORP.
```

(TYPE CHOICE NUMBER)

```
1  DRAW OR CHANGE PICTURE
2  SAVE RESULTS ON TAPE
3  LOAD FROM TAPE
4  EDIT TEXT AND CONTROLS
5  DISPLAY DYNAMIC RESULTS
6  LOAD & RUN PRESENTATION
```

- 1 DRAW OR CHANGE PICTURE lets you make pictures and graphic illustrations for your own pleasure or formal presentations.
- 2 SAVE RESULTS ON TAPE lets you save your artwork on cassette tape for retouches, or when you're ready to show those fastidious critics your "new masterpiece".
- 3 LOAD FROM TAPE lets you see a picture that you previously saved on tape.
- 4 EDIT TEXT AND CONTROLS (only available on 16K Color Computer) lets you type and revise scrolling text.
- 5 DISPLAY DYNAMIC RESULTS (also only available on 16K Color Computer) lets you see the results of the scrolling techniques that you organized in Edit Text and Controls. You can make your edited text scroll over an illustration.
- 6 LOAD & RUN PRESENTATION (only available on 16K Color Computer) lets you play back a series of pictures and text in a continuous presentation.

The Art Gallery Data Tape

The Data tape, included as part of the Art Gallery package, should give you an idea of the versatility you have in drawing and storing your finished "attempts". Unfortunately, those without a cassette player cannot view the Data tape.

Make sure that your cassette player is properly connected to your Color Computer. Insert the cassette in the recorder and rewind the tape.

Loading the Program (continued)

If you have a 4K Color Computer, you will have to load the Data tape presentation one picture at a time. Press **(3)** at the Menu.

The screen will show:

PREPARE RECORDER TO PLAY
PUSH "ENTER" WHEN READY
(OR "BREAK" TO GO BACK TO MENU)

Press **(ENTER)** and the screen will show: LOADING (with an @ sign at the bottom of the screen). After the picture is loaded, the Menu will return. Press **(1)** to see the picture. After the first picture has been viewed, press **(BREAK)** to return to the Menu. Repeat this process until you have seen all 27 pictures on the Data tape. The 27 images on the Data tape are listed in Appendix B on page 21.

If you have a 16K Color Computer, you should refer to the last instruction, 6 LOAD & RUN PRESENTATION. Using this procedure, all of the images are displayed without interruption. Those with a 16K Color Computer have the option of using 3 LOAD FROM TAPE to view the Data tape pictures one at a time.

After you finish learning the key functions of Art Gallery, see Appendix A to find how to use the Data tape to experiment with the key functions.

The Template

A template is provided with key labels to help you locate and memorize the various functions of Art Gallery. Place the overlay on the keyboard.

Running the Program

It takes practice to become adept at drawing pictures the way you want them to look. Let's go over the different key functions before you begin drawing.

Draw or Change Picture

Press **(1)** for DRAW OR CHANGE PICTURE. A small blinking cursor (a light dot) will appear in the upper left corner of your color video screen.

Pressing **(BREAK)** will return you to the Menu.

The Arrow Keys

The four arrow keys will move the cursor in the direction of the arrow. Press **(SHIFT)** and an arrow key to make the picture move in the direction of that arrow. You can even scroll the picture off the screen in any direction. If you scroll the picture off to the left, it will reappear from the right, so this is no way to make a bad drawing disappear.

The **(ENTER)** key returns the cursor to the left side of the screen.

Changing Colors

Art Gallery has two color screens. The first screen is green. The cursor is clear until you press one of the keys to transform it to color. To change the cursor to a color, you press one of four color keys.

For red, press **(W)**.

For blue, press **(E)**.

For green, press **(R)**.

For yellow, press **(T)**.

By pressing **(P)**, the screen changes to a buff color. Red becomes orange. Blue becomes magenta. Green becomes buff. Yellow becomes cyan.

If you don't like quasi-psychedelic colors, press **(P)** again to return to the green screen.

The **(CLEAR)** key makes the cursor colorless. After pressing the **(CLEAR)** key, you can move the cursor around to the desired point on your drawing without affecting what you've already drawn. Then you press one of the color keys to continue drawing.

Running the Program (continued)

Changing the Size of the Cursor

The **(F)**, **(G)**, **(V)**, and **(B)** keys will change the cursor size. The cursor, unchanged, is one unit. You can increase the cursor size up to 19 units in width and height.

Press the **(F)** key and the cursor will become wider. Press the **(G)** key to return the cursor to its normal size.

You can also make the cursor taller by pressing the **(V)** key. To return the cursor to its normal size, press the **(B)** key.

Each time you press the **(F)** or **(V)** key, two units are added to the size of the cursor. You may enlarge the cursor up to nine times. The larger the cursor, the slower it moves around the screen.

Connecting Lines

The **(Y)** and **(U)** keys may be used to connect two points on the screen with the straightest possible line. Pressing **(U)** will cause the computer to remember the position of the cursor. You may then move the cursor to another point on the screen without leaving a trail of color.

Pressing **(Y)** will connect the two points. The **(Y)** key will also cause the computer to remember the current cursor position so you can connect it with the next point. When you connect lines horizontally or vertically, a straight line is produced. Connecting points diagonally will produce a "lightning bolt" effect. This comes in real handy when you draw severe thunderstorms.

Filling an Outlined Area with Color

You can use the **(C)** key to fill an outlined area with the color of the outline. To use this feature, first draw an outline. Press **(CLEAR)** to move the cursor inside the outline. Press **(C)** and the area will be colored in.

Depending on the shape of the outline, the outline may not be completely filled with color the first time you use this option. Press **(CLEAR)** again, and move the cursor to the area you want colored. Press **(C)** to complete the coloration.

Drawing Triangles

You can draw triangles by using the **(A)**, **(S)**, **(Z)**, and **(X)** keys. The triangle expands outward from the cursor in a direction corresponding with the position of the key in the block. The **(A)** key will cause the triangle to expand to the top of the screen and to the left.

The **(S)** key will cause the triangle to expand to the top of the screen and to the right. The **(Z)** key will cause the cursor to expand to the bottom of the screen and to the left. The **(X)** key will cause the triangle to expand to the bottom of the screen and to the right.

Triangle expansion continues while the key is held down and expansion stops when you release the key. Triangles will only expand to a certain point and then stop whether the key is held down or not. You can also use any of the keys simultaneously, change colors, and change the size of the cursor while drawing a triangle.

The **(D)** key makes a diamond, acting as if you pushed all four triangle keys at once. You can maneuver the cursor just as you do in making triangles.

Shrinking a Picture

After drawing a picture, you may want to shrink it to make it a small part of a larger picture. Pressing the **(SHIFT)** and **(@)** keys will shrink the picture to one half its original size. You may then use the **(SHIFT)** and arrow keys to move the shrunken drawing anywhere on the screen. An excellent way to start over, without pressing the reset button, is to press the **(SHIFT)** and **(@)** keys until your drawing disappears.

Using Joysticks

The left joystick can be used to move the cursor. Pressing **(Q)** will transfer control of the cursor to the joystick. The cursor will move in the direction you move the joystick's lever.

Holding the joystick's red button will make the cursor clear. Releasing the button will make the cursor leave a trail of color. All of the functions may be activated while the joystick is being used. To return control to the keyboard, simply press one of the arrow keys.

Note: The keyboard functions will not work while the joystick's button is pushed.

Running the Program (continued)

Printing Letters on the Picture

Art Gallery lets you print letters and symbols in your choice of colors and sizes (just like buying shirts). To print letters, you must first decide on the cursor size. Each time you press the **(F)** or **(V)** keys, two units are added to the cursor's size. For the smallest letter you can print, press the **(F)** key twice to make the cursor 5 units wide. Press the **(V)** key three times to make the cursor 7 units tall.

You can make the letters tall and thin, short and wide, or any other combination. When you have decided what size you want the letters, select a color. To select a color, you press the **(CLEAR)** key, then the key for the desired color. If you do not press the **(CLEAR)** key before selecting the color, the cursor will type color blocks, rather than color letters.

To make letters, press the **(SHIFT)** key and the letter key. You can press the **(SHIFT)** and the **(O)** keys to lock the keyboard into an upper case mode, but you must remember to press them again to change colors or cursor size.

For dual character keys (1, !), the bottom character will print without the SHIFT key and the top character will print when the **(SHIFT)** key is pressed.

The cursor will move to the right when a character is printed. When you get to the end of a line press **(ENTER)** for the cursor to return to the left. You then need to use the arrow keys to move the cursor up or down for the next line of letters.

Highlighting Characters

You can give your characters depth by reprinting the same letters in a different color, one position lower than the first line. Follow this example:

1. Select a large character size by pressing the **(F)** and **(V)** keys several times.
2. Select yellow as the first color by pressing the **(CLEAR)** and **(T)** keys together.
3. Move the cursor to the beginning of a line.
4. Press the **(SHIFT)** key and type a line of characters.
5. Press **(ENTER)** to return the cursor to the left, then carefully position the cursor over the first letter. (Check the upper left corner of the cursor and the character.)
6. Press the **(CLEAR)** and **(E)** keys together to change the color to blue.
7. Move the cursor down by pressing the **(↓)** key once. Then move the cursor to the right by pressing the **(→)** key once.
8. Hold down the **(SHIFT)** key and type the same letters again.

Saving Your Creation

After you draw a picture, you may want to save it on tape. Press **(BREAK)** for the Menu. Press **(2)** for SAVE RESULTS ON TAPE. Make sure the cassette recorder is properly connected.

The screen will show:

```
PREPARE RECORDER TO RECORD
PUSH "ENTER" WHEN READY
(OR "BREAK" TO GO BACK TO MENU)
```

Press "Record" and "Play" on your tape recorder simultaneously. Set the tape recorder counter to zero. When the tape and recorder are both set, press **(ENTER)**. If everything is correct, the screen will show:

```
RECORDING
```

An @ sign will appear at the bottom left of the screen while the picture is being saved. The Menu will appear when the drawing is recorded.

Be sure to identify the tape's contents by writing the counter number of each recorded entry on the label.

Loading a Picture from Tape

To load a picture you have previously saved, make sure the recorder is connected properly, and insert the tape. Set the counter to zero, and if the picture you want is not the first one on the tape, press the "Fast Forward" button to get to the desired counter number. Press the "Rewind" button if you pass the precise number. Press "Play" on your tape recorder.

When everything is set, press **(3)** at the Menu for LOAD FROM TAPE.

The screen will show:

```
PREPARE RECORDER TO PLAY
PUSH "ENTER" WHEN READY
(OR "BREAK" TO GO BACK TO MENU)
```

Press **(ENTER)**, and the screen will show: LOADING. An @ sign will appear at the bottom of the screen while the picture is being loaded. The screen then returns to the Menu. If there is a problem in loading, the screen will say READ ERROR.

If there is a problem, rewind the tape and press **(ENTER)**. If your second attempt does not work, you need to start over by pressing **(BREAK)** for the Menu.

For 16K Users Only

If you are using a 16K computer, you have access to a text editing function. Using this function, you can type words in your choice of sizes and colors and make them scroll horizontally or vertically on the screen at a speed you designate.

If you have already drawn a picture in the DRAW OR CHANGE PICTURE section the message you type in EDIT TEXT AND CONTROLS will scroll over the picture. These features will let you add movement to the screen and allow you to make full presentations using Art Gallery.

Edit Text and Controls

Press **(BREAK)** to return to the Menu. Press **(4)** for EDIT TEXT AND CONTROLS. The screen will have a cursor flashing in the upper left corner. Each time you type a letter, the cursor moves to the next space. Anything typed will appear in upper case letters.

This feature of Art Gallery lets you type and edit text. You may type and edit up to 191 lines. When you have finished typing the message or story, the text will be displayed when you press **(BREAK)** and **(5)** for DISPLAY DYNAMIC RESULTS at the Menu. If you drew a picture in DRAW OR CHANGE PICTURE, the message will scroll over that picture.

Color, size, scrolling direction and scrolling speed of the message are your decisions. Unless you enter control information (described later), the text that follows an asterisk (*) will be scrolled vertically in red and will be 5 points wide and 7 points high.

For example, type an asterisk (*) and **(H)(E)(L)(L)(O)**. Press **(BREAK)**. At the Menu, press **(5)** for DISPLAY DYNAMIC RESULTS. A red HELLO should scroll vertically up the screen. The message will repeat until you press **(BREAK)** to return to the Menu. Procedures of how to choose size, color, direction, and speed of the scrolling message are given next.

Changing Controls

You may change the dimensions at any time by inserting control information in front of the text you just entered.

First, press the **(SHIFT)** and **(→)** keys four times to move the existing text to the right. Don't move it too far or it will not be visible on the screen.

The slash (**(/)**) is a control key like the asterisk. The slash comes before the asterisk. It tells the program that more control information follows. Anything to the left of the asterisk will not be scrolled when you display the picture.

Anything to the right of the asterisk will be scrolled when you display your picture. The different control options will always be between the slash and the asterisk.

You can have one control area that will govern the color, size, and spacing of the next lines. To make all lines have the same size, color, etc., there should be a control area in the first line. The rest of the lines only need an asterisk before the first letter of each line. Lines will not be displayed if they do not have an asterisk before the first letter of each line.

Position the cursor over the asterisk. Press the **(SHIFT)** and **(→)** keys to move the asterisk and text over several spaces. Now press the **(←)** key enough times to move the cursor to the flush left position on the screen. Type the slash mark. The area between the slash and the asterisk is called the control area.

Note: If you enter any incorrect information in the control area, it will be detected when you "Display Dynamic Results." The line containing the error will be ignored and a question mark will be placed in the first position of the line. If you see a question mark while you "Edit Text and Controls", correct your error and change the question mark back to a slash. Then try again.

Changing the Color

Let's start by changing the color of the text. Type either a **(B)** for blue, **(G)** for green, **(Y)** for yellow or an **(R)** for red in any space between the slash and the asterisk. The text will always be red unless you choose another color. The background screen will be green or whatever colors you used when you drew your background picture. If you choose green as your text color, the message will not show up on the screen unless you have already made the background another color in Option 1 of the Menu.

You can also change the displayed colors to orange, magenta, buff and cyan as you did earlier in this manual (remember psychedelic?). To do this, press **(BREAK)** and **(1)** at the Menu. Press **(P)** to change the screen colors to orange, magenta, buff and cyan. Press **(BREAK)** and **(4)** at the Menu. If you type **(R)** for red in the control area, the message will be displayed as orange on a buff background, etc.

Press **(BREAK)** to go back to the Menu. Then press **(5)** to view the results.

For 16K Users Only (continued)

The same color is repeated unless you change the color in the following control areas. For example, if you chose blue letters (by typing /B* in the first line), any lines following would be blue. You could make the next line yellow by typing /Y* . If you want to change the color for a line, you need to insert your new color choice inside each line's control area.

For example:

```
 $\text{/Y*}$  (for a yellow line) H E L L O  
 $\text{/R*}$  (for a red line) H E L L O  
* (following lines will be red until all lines  
have been scrolled) H E L L O
```

Press **BREAK** and **5** to view the results. Press **BREAK** and **4** for the editing screen.

Deleting Characters

You may delete letters by pressing the **SHIFT** and \leftarrow keys. If you are in the first space (flush left) and press the **SHIFT** and \leftarrow keys, the entire line will be deleted. To insert a blank line, place the cursor over the last space of a line (flush right) and press the **SHIFT** and \rightarrow keys. The blank line will be below the cursor.

Changing the Character Size

You can control the letter size of the scrolling message. The character size displayed will always be 5 by 7 if you do not designate a particular character size. You can control the letter size of the scrolling message. -

Characters can be no smaller than 5 by 7. The first number is the width and the second number is the height. As you did when printing letters on the screen, you can choose your own combination of character sizes.

You choose the desired character size inside the slash and asterisk. For 9 by 11, you would type /X11 with no spaces. Use the **SHIFT** and \rightarrow keys to add the necessary spaces for your line measurement. Lines following will be 9 by 11 unless you insert different character sizes for each line.

Now press **BREAK** and **5** in the Menu. The messages each have the same height but are different colors on different lines.

Press **BREAK** and **4** at the Menu.

If you want to change the width alone, type one number in the control area. For example, /21* would have a character width of 21 and a character height of 7. Another example would be /X9* , which means a character width of 5 and a character height of 9.

For 16K Users Only (continued)

The wider the characters, the fewer will fit on the screen when you are scrolling vertically. This table should be helpful.

Character Width:	5	7	9	11	13	15	17	19	21
Letters per Line:	21	16	11	10	8	7	6	5	5

Changing Space Between Lines

Changing character height may necessitate your changing the spacing between lines. This is only used for vertical scrolling. If characters are 7 points high, you usually should have 10 or more points between lines. A new spacing is indicated inside the control area by typing a plus sign followed by a number between 1 and 99.

/+10* indicates a 5 by 7 character size with 10 point spacing between each line.

/7X15+20* shows a 7 by 15 character size with a 20 point spacing between each line.

Shadows

You can make your scrolled message (vertical only) look three-dimensional by adding shadows. Type a line of text with one color and only advance one or two lines. Then type the same text choosing different color and advance the usual distance between lines.

Continuing with the example, use the **SHIFT** and **→** keys to make room in the control area for the added characters. For the first line, make the line spacing **+1**. For the second line make the line spacing **+10**. Your text screen should look like this:

```
/B9X11+1*HELLO  
/Y+10*HELLO
```

Press **BREAK** and **5** at the Menu to see the result.

Press **BREAK** and **4** at the Menu.

Multiple Colored Lines

Multiple colors can be printed on the same line only during vertical scrolling. This process involves making line spacings for several lines in text editing so that they will appear on the same line on the display screen in different colors. Let's see how the alphabet would look in multicolored letters:

```
/RX11+0 *A D G J
/B      * B E H
/Y     +10 * C F I
```

Follow this procedure anytime you want to have multicolored lines. Make sure the asterisks are in line. Make sure you have the letters spaced so that the words can be read diagonally.

Changing the Scrolling Speed

You can change the scrolling speed. The number must be between 1 and 99. The lower the number, the faster the scrolling. Vertical scrolling works best with a speed between 6 and 15. Horizontal scrolling works best at a speed between 1 and 5.

To change the scrolling speed, first press the **(SHIFT)** and **(→)** keys enough times to make room for "S" and the desired number. Without leaving a space between them, type **(S)** and **(6)**. Press **(BREAK)** and **(5)** at the Menu to view the results.

Press **(BREAK)** and **(4)** at the Menu to learn some more editing tips.

Horizontal Scrolling

You can make your edited text scroll horizontally. All characters will be displayed when using horizontal scrolling. To change the scrolling direction to horizontal, type an **(H)** before or after the character size and inside the control area.

Horizontal scrolling can be placed in any position on the screen. You create your horizontal line placement by inserting a **(+)** and a number between 1 and 96 inside the control area. The top of the screen is +1. The bottom of the screen is +96. The line will scroll at the +15 position unless you choose another position.

For your example, press the **(SHIFT)** and **(→)** keys to make room in the control area for the "H". If you want all of the text to scroll horizontally, you only need to insert **(H)** on one line. After you type the **(H)** in the control area, press **(BREAK)** and **(5)** at the Menu.

Press **(BREAK)** and **(4)** at the Menu.

For 16K Users Only (continued)

Adjusting the Horizontal Line Placement

If you have an illustration for the background of the scrolled message, you might want the message to scroll in a particular area. To make the line scroll at the middle of the screen, type \oplus **4** **8**. To make the line scroll at the bottom of the screen, you have to consider the character size. If the character size is 7, you would use \oplus **8** **9** ($96 - 7$). If the character size is 21, you would use \oplus **7** **5** ($96 - 21$).

For the example, make the line scroll across the bottom of the screen. To arrive at this figure, you subtract the character height 11 from 96. To make room in your control area, press the **SHIFT** and \rightarrow keys three times. Then type \oplus **8** **5** in the space. Press **BREAK** and **5** at the Menu to see the results.

Press **BREAK** and **4** at the Menu.

Tips on Using Horizontal Scrolling

Since all characters are displayed in horizontal scrolling, you will need to allow for extra spaces at the end of some lines. To eliminate these spaces, position the cursor over the asterisk. Press the **SHIFT** and \rightarrow keys until the text reaches the end of the line.

Since nothing to the left of the asterisk is displayed, empty space to the left of the asterisk will not affect your displayed text.

Making one line scroll horizontally and the next line scroll vertically is done just by inserting an **H** in the first line's control area and a **V** in the second line's control area. You can repeat this process throughout your text.

To return to vertical scrolling, either type over the **H** in the control area with a **V**, or delete the **H** by pressing the **SHIFT** and \rightarrow keys. Art Gallery scrolls vertically unless an **H** is in a control area.

If you insert an **H** in the first control area and do not insert a **V** in the following control area, the rest of the text will be scrolled horizontally. If you insert an **H** in the first control area and a **V** in the second control area, the rest of the text will be scrolled vertically.

Stop the Scrolling

When you select **(5)** at the Menu, the message will repeat until you press any key. Press any key again to resume the scrolling. Press **(BREAK)** to return to the Menu.

By placing a **(Z)** in the last control area you can make the text stop at the end of the message and return to the Menu. This feature is necessary when you have Multi-Load Presentations as described next.

Preparing Multi-Load Presentations

If you want to prepare a presentation that includes several pictures or requires more text than you can fit in the 191 lines in EDIT TEXT AND CONTROLS, recording several presentations lets you save additional information.

1. Start with a new tape, making sure your tape is completely erased.
2. Prepare the first part of your presentation. If you want an illustration behind your text, use Option 1, DRAW OR CHANGE PICTURE. Then prepare the first piece of text.
3. Check your presentation in Option 5 and make sure it is the way you want it.
4. Press **(2)** to record the presentation on tape. Once recorded, do not rewind the tape until the entire presentation is finished.
5. Prepare the next part of your presentation. Change the picture or make a new one. Type your new text. Remember that previously entered text can be deleted by pressing the **(SHIFT)** and **(←)** keys when the cursor is at the first letter of a line.
6. Before recording the last part of your presentation, add a **(Z)** control in the last control area. No other parts of the presentation should contain a "Z" in the control area.
7. When you have finished recording all sections, rewind the tape. Press **(BREAK)** and press **(6)** to LOAD & RUN PRESENTATION at the Menu. Push "Play" on your tape recorder. The video should show your presentation in living color. The presentation will not stop until it reaches the "Z" control.

If things do not happen the way you want the first time, repeat the above process again. Picasso made a few mistakes too.

More Fun with the Data Tape

Now that you're familiar with all of the various key functions of Art Gallery, let's use some of those key functions and experiment with the Data tape.

You must have a cassette recorder and the necessary connection cables to view the Data tape.

Load the Data tape according to the instructions on page 3 making sure the counter is set at 000. When the tape is loaded, the Art Gallery Menu will appear. Press **(1)** for DRAW OR CHANGE PICTURE to view the first image.

All of the images available in the Data tape are listed in Appendix B. The smiling cartoon character with his hand extended has a "balloon" space for something to say. Let's practice typing letters, using the method learned on page 8, by giving the character something to say.

The cursor is flashing in the upper left corner of the screen. Move the cursor inside the box with the **(↓)** and **(→)** arrow keys. Remember, you must enlarge the cursor so that you can type letters. Press the **(F)** and **(V)** keys (making the cursor expand), until you decide on letter size. Press the **(CLEAR)** key. Press a color key. Now let's type a message in the "balloon".

Hold the **(SHIFT)** key down and type LET ME OUT OF HERE. You'll probably need to move the cursor to the next line to get all of the message inside of the "balloon".

Press the "Fast Forward" key on your tape recorder. Watch the counter turn and when it reaches number 038, press "Stop". If you pass 038, press "stop". Rewind the tape until it reaches 038 and press "Stop". Press **(BREAK)** on your Color Computer. Press "Play" on your tape recorder then **(3)**. Press **(ENTER)** to load the image.

When the Menu returns, press **(1)**. The checkerboard frame should be displayed. If not, press "Rewind" on your recorder and try to load the picture again.

This time, use your creativity and draw a picture inside of the frame. Remember, you have the versatility of the keys of your keyboard or you can transfer control to your Joystick.

You can make additions to any of the 27 images on the Art Gallery Data tape. Use the counter numbers provided in Appendix B to arrive at the desired image.

Note: Do not save results on tape when using the Data tape. Any changes made on the Data tape will be permanently stored if you save results on tape.

Appendix A — More Fun with the Data Tape (continued)

For 16K only

With your 16K Color Computer, you can make messages scroll down or across the images of the Data tape by using the text editing function of Art Gallery. Let's find a suitable image candidate on the Data tape.

Press "Fast Forward" on your tape recorder. Watch the counter and press "Stop" when the counter reaches the 186. Press "Play" on your tape recorder. Press **BREAK** and **3** and then **ENTER**.

After the image is loaded, the Menu will return. Press **1**. For 186 on the counter, the reindeer and Christmas tree should be displayed.

The cursor is waiting in the upper left corner of the screen. You can make additions to the image if you like. For now, press **BREAK** to return to the Menu. Press **4**.

You can type a message, using the necessary control keys, and make it scroll over the image. Because the Christmas scene is a traditional red and green, you will probably want to make the message scroll in a different color.

The cursor is waiting in the upper left hand corner of your text editing screen. The first character you type is the slash **/**. To indicate a color, press **Y** for yellow. Type **S1** for the speed at which the message will scroll.

Type **H** to indicate a horizontally scrolled message. Remember, if you do not indicate horizontal, the message will scroll vertically. Type the character size in the format **9X9**.

Now you must type the asterisk (*****). Anything to the left of the asterisk will not be scrolled. Anything to the right of the asterisk will be scrolled. At this point, your text editing screen should appear like this:

```
/YS1H9X9*
```

After the control area, type the message, SEASON'S GREETINGS. MERRY CHRISTMAS FROM THE (insert your last name).

This message requires at least two lines. For the second line all you have to do is type an asterisk at the beginning of the line and then the remainder of the message.

Your editing screen should look like this:

```
/YS1H9X9*SEASON'S GREETINGS.  
*MERRY CHRISTMAS FROM THE (your name).
```

Press **BREAK** and then **5**.

Appendix B — Data Tape Pictures

Data Tape Pictures

Below is a list of the twenty-seven images you will see on the Data tape. The numbers to the right of them are the counter numbers you use to load a desired image. Due to differences in cassette tapes and cassette tape players, these numbers may vary accordingly.

If the images do not load properly on your first attempt, try rewinding the tape to a slightly lower counter number. For instance, if the Butterfly doesn't load at the 018 counter number, try 016 the next time. The message, READ ERROR will appear if the image is not loading correctly.

1. Cartoon figure with "balloon"	000
2. Butterfly	018
3. Miniature mountain scene	028
4. Checkerboard frame	038
5. Mountain scene	047
6. Rose	056
7. Miniature rose	065
8. USA map	074
9. Miniature map of the USA	082
10. City scene	091
11. Miniature city scene with frame	099
12. Viking ship	107
13. Lion	114
14. Football scene	122
15. Eagle	130
16. Card King	138
17. Miniature King Card	145
18. Card King	160

Appendix B — Data Tape Pictures (continued)

19. Geometric Design	167
20. Old Glory	174
21. Miniature Old Glory	180
22. Leaping reindeer/Christmas tree	186
23. Pointing hound	192
24. Miniature pointing hound	199
25. Heart	204
26. Guitar	210
27. Miniature Guitar	216

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