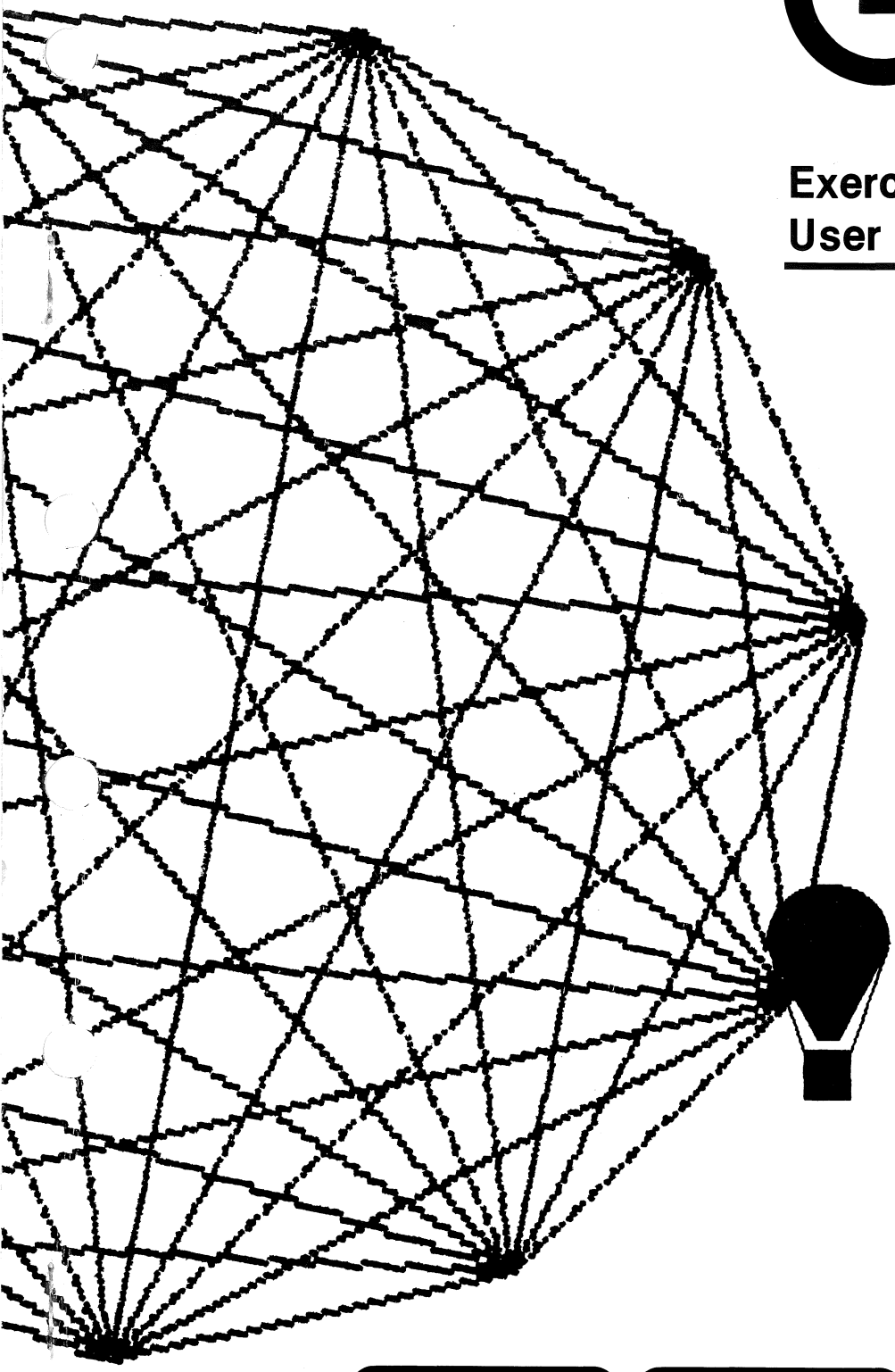
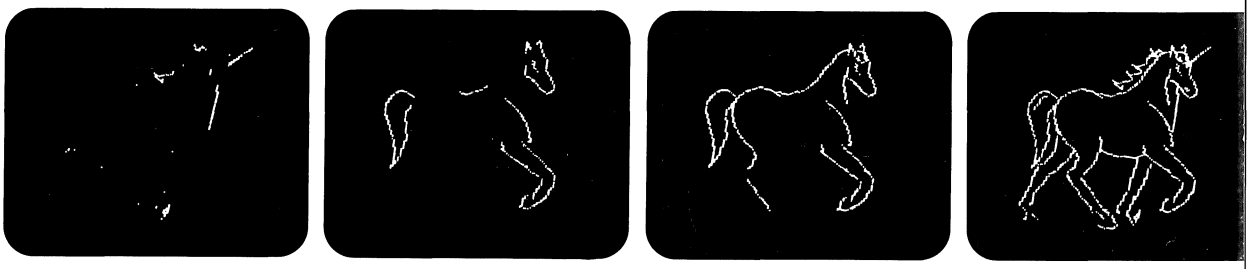
GIGI™

Exerciser User Guide





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Dear Customer:

The GIGI Exerciser User Guide (AA-L401A-TK), which explains a software program used to test the GIGI keyboard, is not included in this shipment.

If you wish to receive the final version of this material, please fill in your name and address on the enclosed postcard and mail it to us. Your material will be reserved and shipped directly to you as soon as it becomes available.

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GIGI EXERCISER USER GUIDE

Order Number AA-L401A-TK

This manual describes how to use the GIGI Terminal Exerciser Program, which tests the hardware graphics functions of the GIGI terminal.

To order additional copies of this manual, contact the Software Distribution Center, Digital Equipment Corporation, Maynard, Massachusetts 01754.

August 1981

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PREFACE

The GIGI Exerciser is a dialup test program designed to test specific GIGI terminal functions. The exerciser consists of 8 tests:

1. Color Bar Test
2. Display Test
3. Screen Alignment Pattern Test
4. Communications Test
5. Writing/screen Color Test
6. Max Vector Test
7. Vector Generator Test
8. Keyboard Exerciser Test

Tests 1 through 3 perform the same functions as the self tests contained on your terminal. Tests 4 through 8 are new tests. Each test exercises a specific function in the terminal.

When all tests are successfully completed, the GIGI terminal is functioning properly.

The following chapters describe how to prepare your terminal to run the exerciser program and how to run the test sequence.

1 PREPARING TO RUN THE EXERCISER

Preparations for running the exerciser program include setting up the terminal and then calling up the exerciser program. The following sections describe these procedures.

THINGS TO DO BEFORE CALLING

Before calling and starting the GIGI Exerciser, perform the following operations:

1. Locate the 20mA connector on the rear of the terminal. Disconnect any cables connected to this connector and install the 20mA loopback connector. However, if you do not have the connector it does not prevent you from running all the other tests. The operator should ignore the message described under the communication test. (The connector is part number 70-15503-00).

2. Turn both the monitor and terminal power switches to the ON position.

3. Determine the baud rate of your modem or accoustic coupler. Set the GIGI terminal transmit and receive speeds to match the baud rate. (See Chapter 4 of the GIGI Terminal Installation and Owner's Manual, EK-VK100-IN-002.)

4. Make sure that the following SET-UP parameters are set as follows:

LL	Onln	On Line
PE	Off	Parity off, bit 8 set to space
XO	On	Sent automatically
CI	EIA	Communications interface selected
PK	Off	Programmed Keypad disabled

(See Chapter 4 of the GIGI Terminal Installation and Owner's Manual, EK-VK100-IN-002).

CALLING UP THE EXERCISER

Use the following procedure to call in to the GIGI Exerciser:

1. Turn the acoustic coupler power switch to the ON position.

2. Ensure that the coupler or modem switches are set correctly. Instructions on how to set the switches are contained in the Owner's Manual shipped with the coupler or modem.

3. Dial the telephone number of the exerciser. The exerciser can run at both 300 baud and 1200 baud. To run the test at 300 baud dial (617) 366-3928. To run the test at 1200 baud dial (617) 366-3908.

4. The exerciser is set to automatically answer all incoming calls. Once the call is answered the modem will generate a high pitched tone. The tone should be loud and clear. If the tone sounds distant or unclear hang up your phone and call again.

5. Insert the telephone handset firmly and completely into the rubber cups if you are using an acoustic coupler. Press the data button if you are using a modem.

6. Look for the modem or acoustic coupler carrier indicator to turn on. If the carrier indicator is not on, check the terminal preparations and restart this procedure from step 1.

7. Press the RETURN key on the terminal keyboard until the prompt **Username:** appears on the monitor screen. Type **GGDIAG** on the terminal keyboard.

End the keyboard entry by pressing the RETURN key.

8. The prompt **Password:** now appears on the monitor screen. Type **PROBLEM** on the terminal keyboard. End the keyboard entry by pressing the RETURN key. A message reminding you to install the 20mA loopback connector now appears on the monitor screen If you have forgotten, make the connection at this time.

9. Press the RETURN key. The GIGI Exerciser now starts.

   Do not press CTRL/C or CTRL/Z while running the GIGI Exerciser. Doing so will halt the system and prevent you from logging off at the end of the exerciser.

2 RUNNING THE GIGI EXERCISER TESTS

This chapter describes what each of the GIGI Exerciser tests does and examples of test displays. For most of the sequence, the tests automatically follow each other without your intervention.

COLOR BAR TEST

This test displays a color bar or grey scale pattern on the monitor screen for approximately Ø.5 seconds. The color bar grey scale pattern consists of eight equally spaced vertical bars. On color monitors the bars appear from left to right in the following order:

black blue red magenta green cyan yellow white

On a black and white (monochrome) monitor the bars appear as different shades of grey. The bars start with a black bar on the left side of the monitor screen and increase in intensity to a white bar on the right side.

An error in the test occurs if the color bar or grey scale pattern does not appear or portions of the scale are missing from your screen. Either error may indicate that the attached monitor has failed, the video cable between the terminal to the monitor is not connected properly or the GIGI terminal contains an error.

If you suspect that the terminal has failed, connect it to a different monitor (with a different cable) and perform the test again. If the symptoms remain, the terminal has failed.

This test can also be performed as a part of the terminal self test. Chapter 5 of the GIGI Terminal Installation and Owner's Manual provides complete instructions.

DISPLAY TEST

This test displays a full screen of blue, red, green, white and black. Each display screen lasts for approximately Ø.5 seconds. On a black and white monitor the test displays full screens of increasing intensity.

An error in this test occurs if one of the display screens does not appear.

This may indicate that the attached monitor has failed, the video cable between the terminal to the monitor is not connected properly or the GIGI terminal contains an error. If you suspect that the terminal has failed, connect it to a different monitor (with a different cable) and perform the test again. If the symptoms remain, the terminal has failed.

This test can also be performed as a part of the terminal self test. Chapter 5 of the GIGI Terminal Installation and Owner's Manual provides complete instructions.

SCREEN ALIGNMENT TEST

This test appears as a part of the display test. The test fills the monitor screen with a crosshatch pattern. An error or adjustment is needed if all or part of the pattern is missing.

This test can also be performed as part of the terminal self test. Chapter 5 of the GIGI

Terminal Installation and Owner's Manual provides complete instructions.

COMMUNICATIONS TEST

In this test a program is loaded in to the GIGI terminal by the exerciser. This program tests the 20mA current loop communications port. There are no visual indications when this test is running.

Successful completion of the preceding three tests is shown when the following message is displayed on the monitor:

Self Tests Were Successful

Would you like to run the Self-test again (Y/N)?

If there is an error in any of the three preceding tests, the exerciser displays any or all of the following messages:

```
20Ma Communications Test has failed

A Failure has occured

Would you like to run the Self-test again (Y/N)? n
VK100 test is continuing . .

                                        ET Err
```

In addition to the messages, if the 20mA communications test fails, indicator light L1 (located above the terminal keyboard) will blink and ET may appear in the middle of the screen. Check the 20mA loop back connector; the connector may not be correctly installed. Rerun the test and if the error indication remains, the terminal needs repair.

Type Y<CR> in response to the prompt about repeating the self-test to restart the exerciser program from the beginning. Typing N<CR> directs the exerciser to continue; it displays the message:

VK100 test is continuing...

and runs the tests described below.

WRITING/SCREEN COLOR TEST

This test is designed to exercise the writing options and screen options of the graphics commands. The test program:

1. Sets the screen (background) color. The first color set is black.

2. Writes 8 circles on the screen; one circle for each color that the monitor can display. Figure 1 shows what the screen will look like at this point.

3. Changes the screen (background) color. When the background color changes, the corresponding colored circle seems to disappear.

   The test program changes the screen background color a total of 8 times. At the end of the test program all of the colored circles will have disappeared once. The total test time is approximately 1 minute if you are using a 1200 baud communication line.

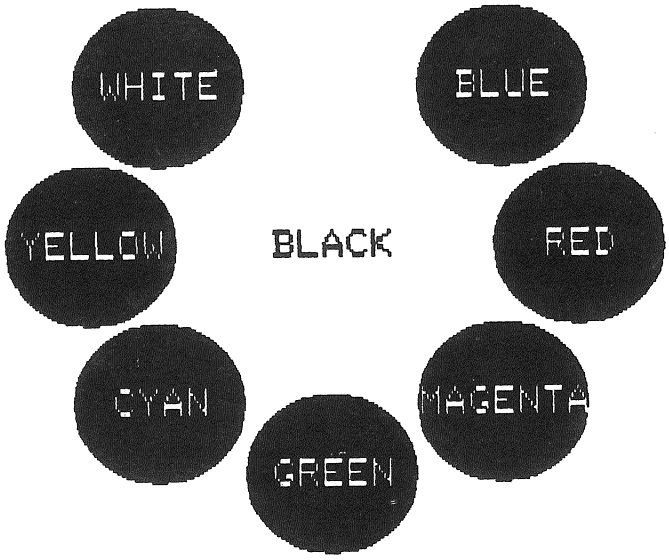


Figure 1.
Writing/Screen Color
Test Pattern

This test can be stopped at any time by pressing the NO SCROLL key on the keyboard. To continue the test, press the NO SCROLL key a second time.

An error in the test occurs if any of the colors are missing from the monitor screen. If one color shows as a different color, the problem may be a misadjusted monitor. If a color is completely missing, the problem may be in the terminal. In each case swap the monitor with another and rerun the test. If the color is still missing or the shade is wrong, the terminal needs repair.

MAX VECTOR TEST

The max vector test is designed to exercise the X and Y positioning circuits in the terminal. The test performs the following functions:

1. Sets the screen background color to red.

2. Draws a circle in the middle of the screen. The circle is red with a blue border line.

3. Draws a series of long blue lines from the circle. the lines will wrap around the screen and end at the opposite side of the circle. Figure 2 shows the pattern at the end of the test.

   This test can be stopped at any time by pressing the NO SCROLL key on the keyboard. To continue the test press the NO SCROLL key a second time.

   An error in the test occurs if there are any spaces between the start or end of the line and the edge of the circle. If the line cuts into any part of the circle, it is considered an error. The terminal must be repaired if either error condition occurs.

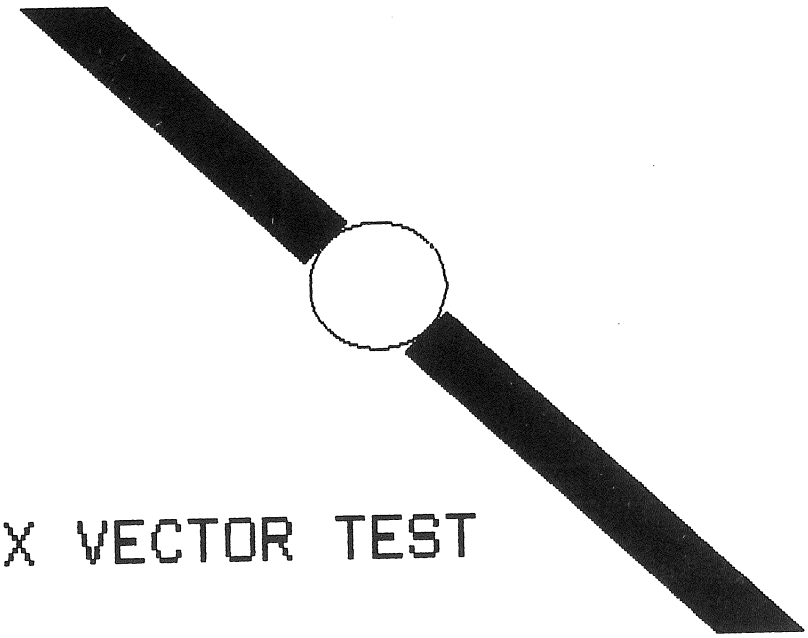


Figure 2.
Maximum Vector Test Pattern

VECTOR GENERATOR EXERCISER

This test exercises the function mode circuitry of the vector Generator. The test performs the following functions:

1. Sets the screen background to blue.
2. Places the cursor near the center of the screen.
3. Draws a series of white lines from the center of the screen. Figure 3 shows this pattern.
4. Erases each line drawn in the preceding step. At the end of this part the screen should be entirely blue with no dots or lines showing.
5. Draws a white line from the center of the screen, rewrites the line in complement mode (erasing it), and then rotates the line in a complete circle.

This test can be stopped at any time by pressing the NO SCROLL key on the keyboard. To continue the test press the NO SCROLL key a second time.

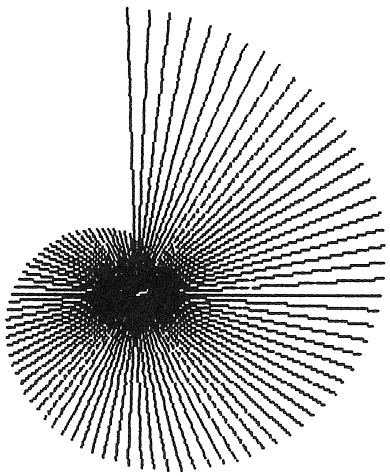


Figure 3.
Vector Generator
Test Pattern

An error in this test occurs if there are any white dots still on the screen at the end of part 4. An error also occurs if a stationary white line remains on the screen in part 5 of the test.

The total test time is approximately 1 minute if you are using a 1200 baud communication line.

KEYBOARD EXERCISER TEST

The keyboard exerciser test verifies that all of the keyboard keys are working correctly. This test is optional. Before the test is started the following message will appear on the screen.

Would you like to run the Keyboard Test?

If you do not wish to run this test type N and then press the return key on the terminal keyboard. This entry skips the keyboard exerciser program and ends the GIGI Exerciser.

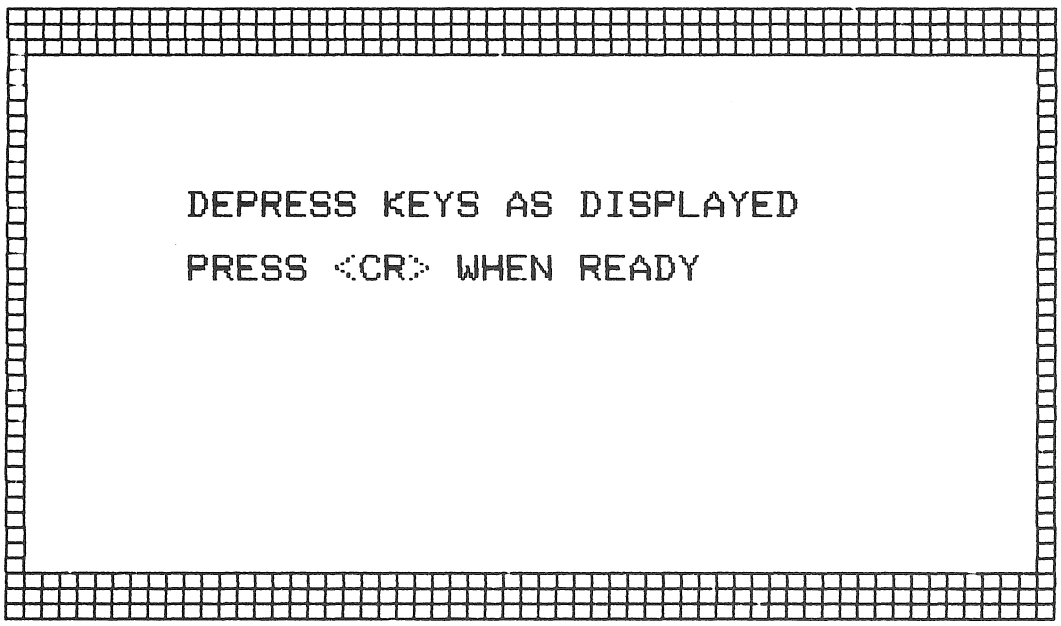
To run the keyboard exerciser test type Y and then press the RETURN key on the terminal keyboard. The following message appears on the monitor screen and a test program is loaded into the terminal.

```
KEYBOARD Exercisor is next (final test).
Would you like to run the Keyboard Test (Y/N)?
```

Please Stand By
Local Program Loading

(About 1 Minute)

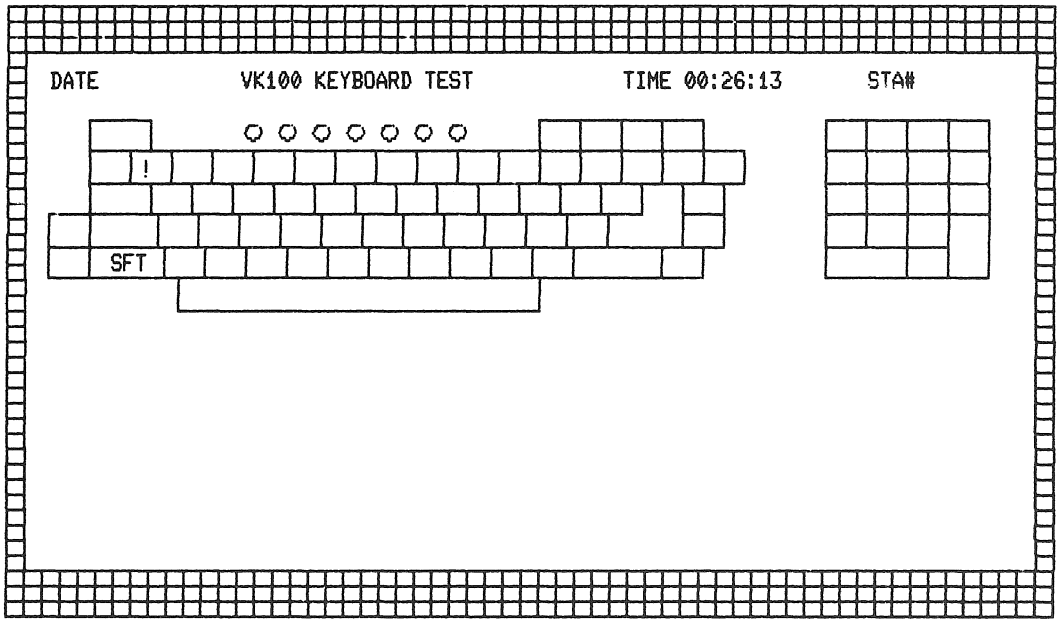
When the program is completely loaded the following message appears on the screen:



Press the RETURN key on the terminal keyboard to start the test.

Once the test is started an outline of the GIGI keyboard appears on the monitor screen (see figure 4). None of the keys on this outline are labeled initially. At least one of the keys will be labelled and blinking. Locate the corresponding key on the terminal within 10 seconds and press it. If the key is working correctly the blinking key stops blinking and the letter is written on the outline.

Figure 4.
Outline of GIGI Keyboard



During this test, the Exerciser sometimes requires that you press two keys at the same time. When this is the case, both keys are blinking. For example, the first row of characters to be entered requires that you press the SHIFT key and the first row of keys on the keypad at the same time; however, you enter the next row of characters by pressing a single key.

Also, certain of the keys on the keypad are not labeled exactly as they are in the Exerciser diagram; for example, the shift key on the keypad is labeled **SHIFT** whereas the diagram shows that key as **SFT.**

If a red dot appears on the keyboard outline one of the following has occurred:

1. The wrong key was pressed.
2. The key was pressed after the 10 second time limit.
3. The key is defective.

At the end of the test a summary of all the keyboard errors is displayed on the monitor under the keyboard outline. Figure 5 shows the outline and error summary.If more than 5 errors are made during the test the computer automatically stops the test and shows the error summary.

After the summary is displayed, you may rerun the test by typing YES on the keyboard. If you do not want to rerun the test type NO on the keyboard. After you have finished the test disconnect the terminal from the computer, following the procedure described below.

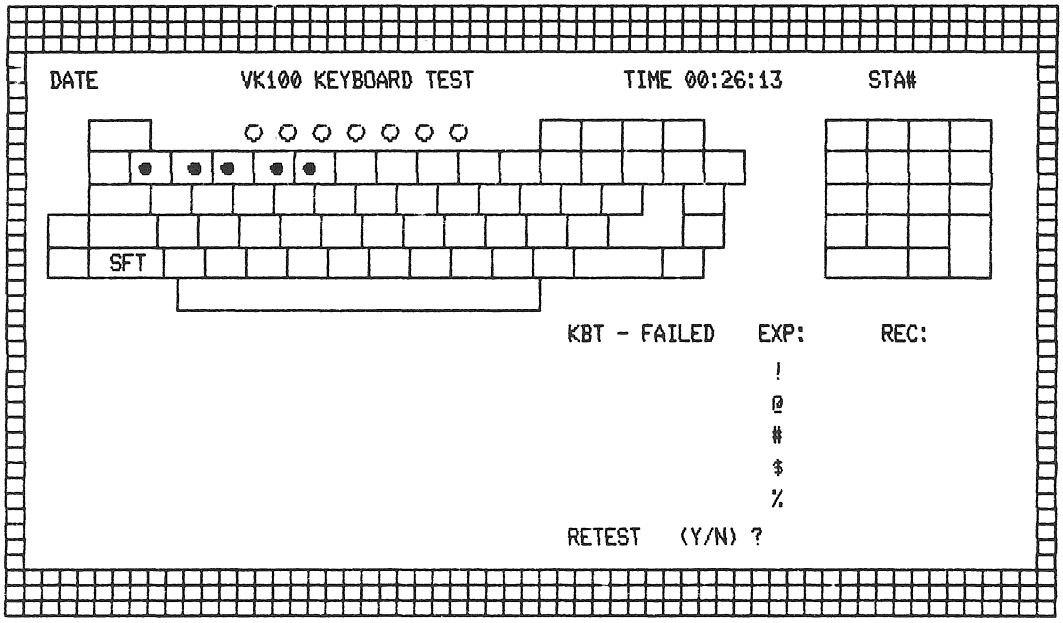


Figure 5.
Outline of GIGI Keyboard with Error Summary

3 DISCONNECTING FROM THE COMPUTER

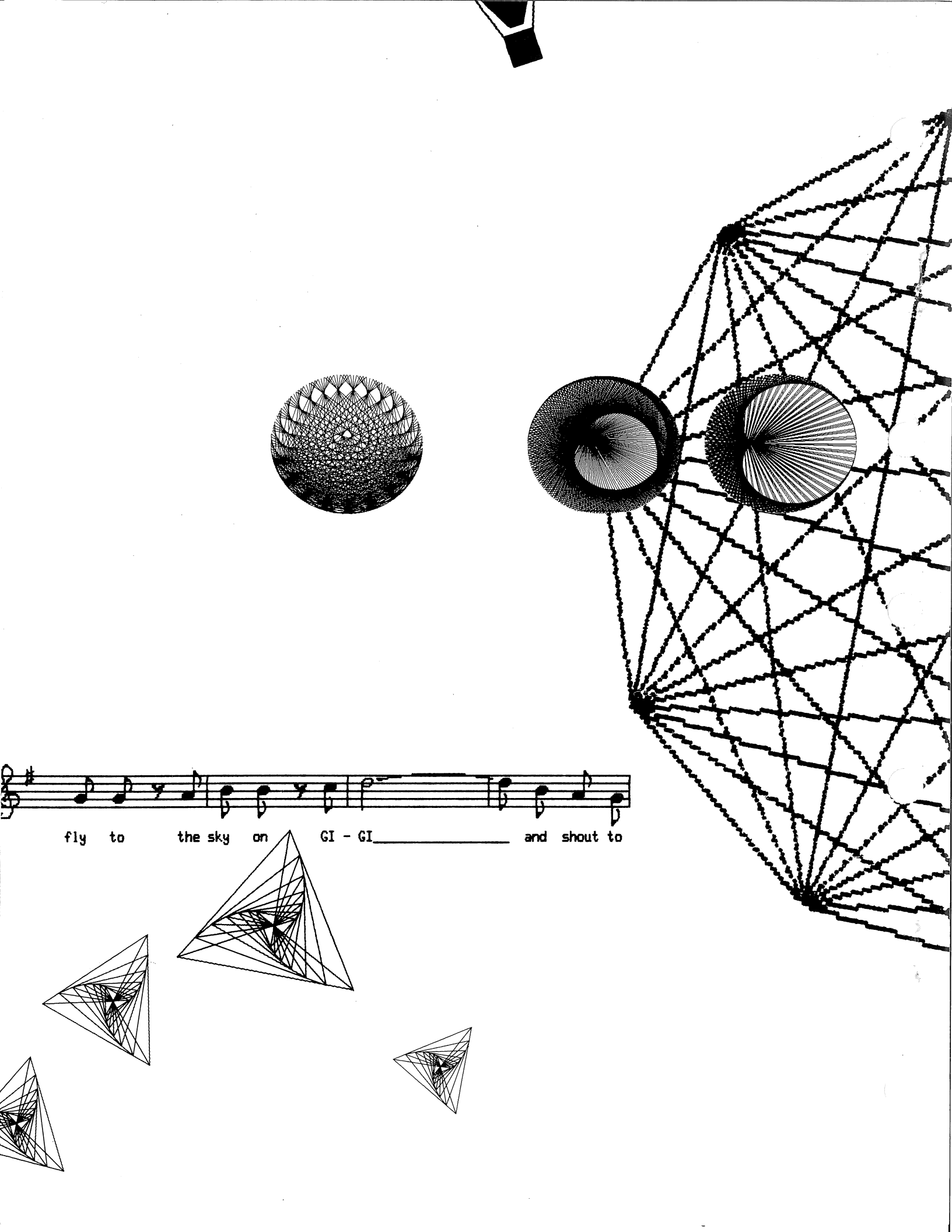
Once the testing is finished the computer will automatically log your terminal off from the system. When the log off is complete the following message appears on the screen:

```
VK100 Test Completed
So Long

BYE...
  GGDIAG       logged out at  7-AUG-1981 15:32:41.42
```

You may now end the telephone connection by removing the telephone handset from the acoustic coupler and hanging up the telephone. If you are using a modem perform the disconnect procedure.

Should the terminal fail one or more tests, refer to Chapter 4 of the Terminal Installation and Owner's Manual.


fly to the sky on GI - GI_____ and shout to