HONEYWELL

SETUP GUIDE FOR VIP7201 DISPLAY TERMINALS

HARDWARE

SETUP GUIDE FOR VIP7201 DISPLAY TERMINALS

SUBJECT

Setup Procedures

The following notice is provided in accordance with the United States Federal Communications Commission's (FCC) regulations.

Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

ORDER NUMBER

CP91-00A PART NO. 71017772-101 December 1982

Honeywell

Preface

This Guide gives directions on how to unpack, set up, and test the VIP7201 Display Terminal and the keyboard. It also supplies information on configuring the terminal and basic keyboard operation.

The customer is responsible for the positioning of the display terminal and for terminal end connection of the communications cable.

A thorough explanation of all configuration line functions, keystroke commands, and terminal applications is given in the VIP7201 Display Terminals User's Reference Manual (Order No. CP92-00). The customer may purchase this manual by calling:

(617) 392-5224

or by writing:

Honeywell Information Systems
Computer Supplies M/S 02
47 Harvard Street
Westwood, Mass. 02090

Failure to properly follow procedures outlined in this guide may void product warranty. See your Honeywell agreement for warranty statement.

USER COMMENTS FORMS are included at the back of this manual. These forms are to be used to record any corrections, changes, or additions that will make this manual more useful.

This document is issued under authority of Honeywell Release Document Number BLCDC8144.
= Revised under authority of change order No. BLCOD0435.

File No.: 1F;3 CP91-00A

CONTENTS

Section 1
UNPACKING AND INSTALLATION

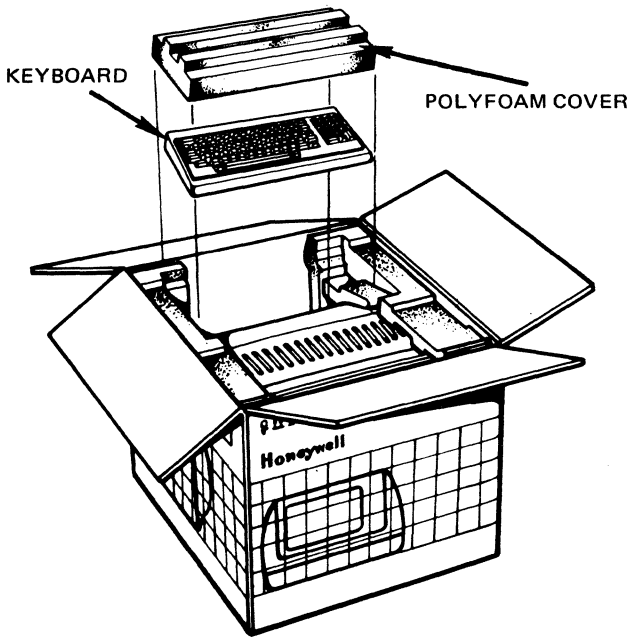
1.1 UNPACKING THE TERMINAL

To unpack the VIP7201 terminal, proceed as follows:

IMPORTANT!

If carton is damaged, NOTIFY CARRIER immediately.

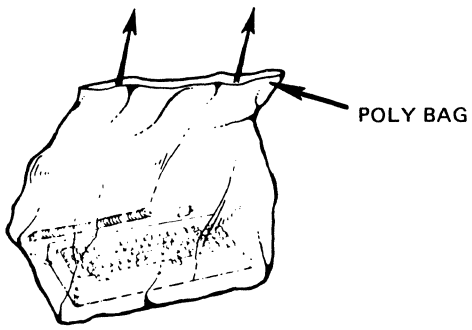
1. Open carton and remove polyfoam cover and keyboard. SAVE ALL PACKAGING.



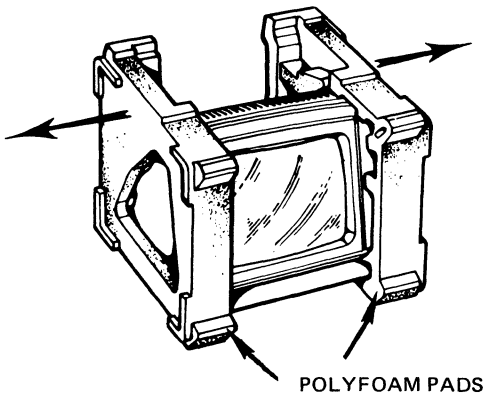
IMPORTANT!

If parts are damaged or missing, see HELP card.

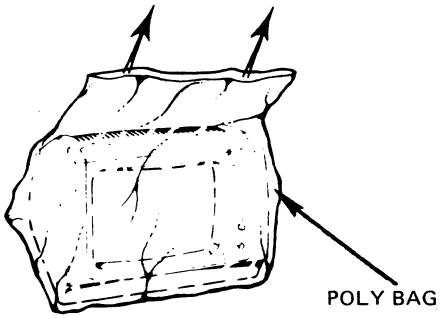
2. Remove poly bag before placing keyboard on table.



3. Lift terminal out of carton and remove polyfoam pads on each side.



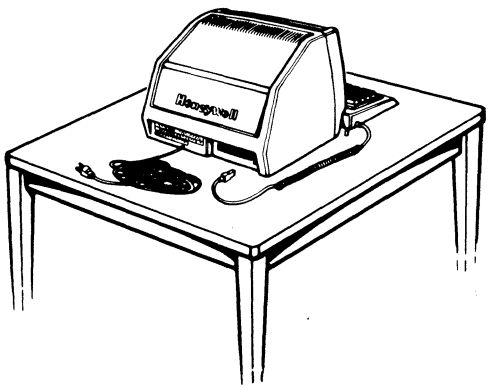
4. Remove poly bag.



5. Place terminal on table or hard surface.

CAUTION

DO NOT locate the terminal on a soft pad such as carpeting. This inhibits the air flow under the unit, which is necessary to keep the terminal operating properly.



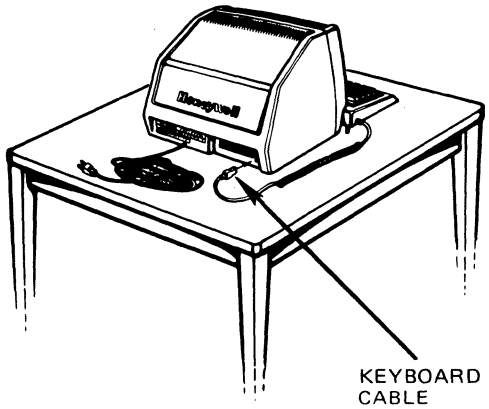
1.2 INSTALLING THE TERMINAL

To install the VIP7201 terminal, proceed as follows:

CAUTION

AVOID CONDENSATION PROBLEMS. Allow cold VIP7201 to warm to room temperature for at least 1 hour before turning ON the power.

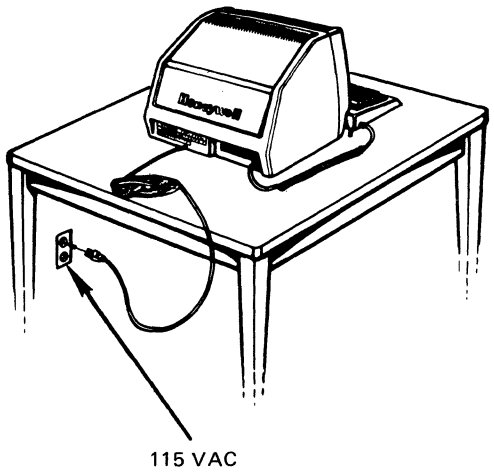
1. Connect keyboard cable.



IMPORTANT!

Before plugging power cable into wall outlet, make sure power switch is in OFF (out) position.

2. Connect power cable.

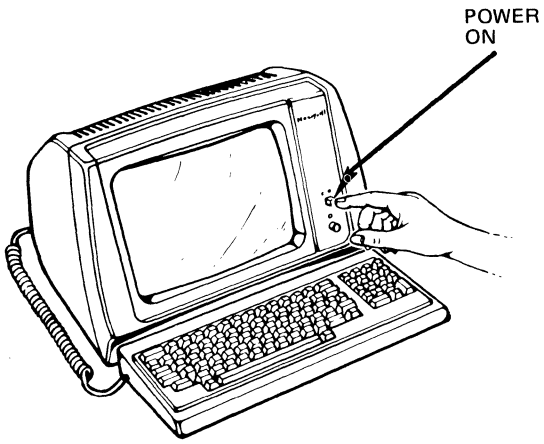


NOTE

The keyboard can be tilted by pulling out the two pegs, located in the bottom of the keyboard, and turning them to lock.

Section 2
TESTING OPERATIONS

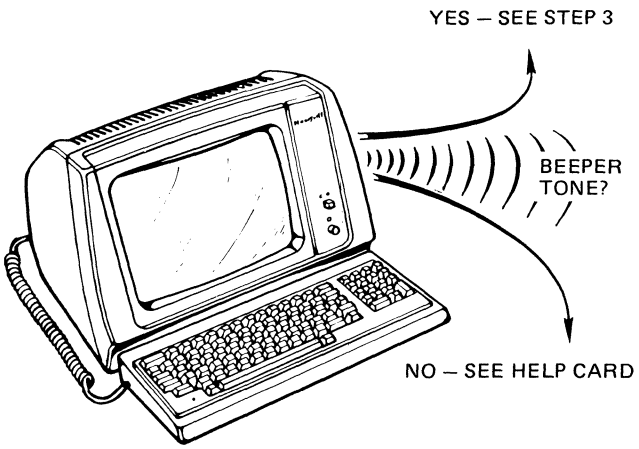
1. After terminal has warmed to room temperature, press top push button to turn ON power.



2. Did terminal beep within 7 seconds?

YES	NO

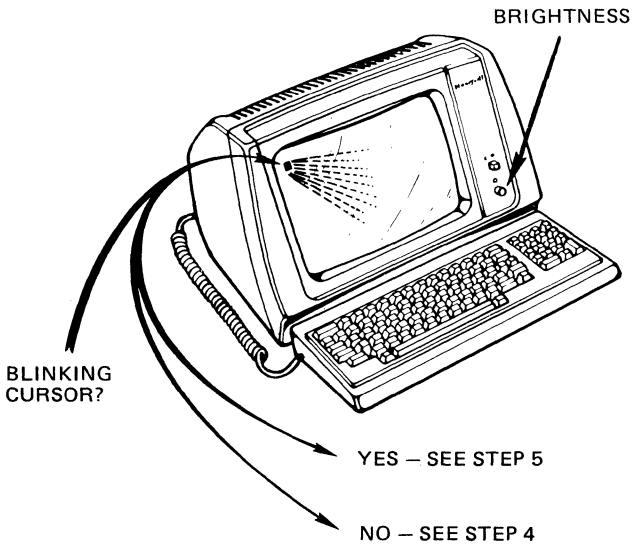
See HELP card.



3. Did blinking cursor appear within 30 seconds?

NO	YES

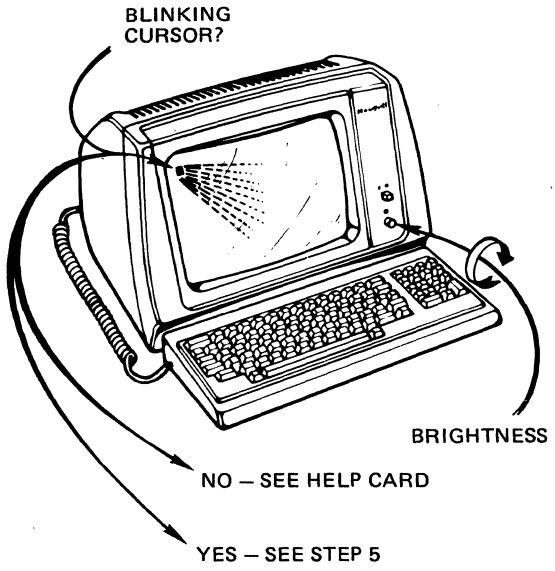
See Step 4. See Step 5.



CAUTION

AVOID DAMAGE to the screen when the terminal is to remain ON but unchanged; reduce the screen brightness using the BRIGHTNESS control.

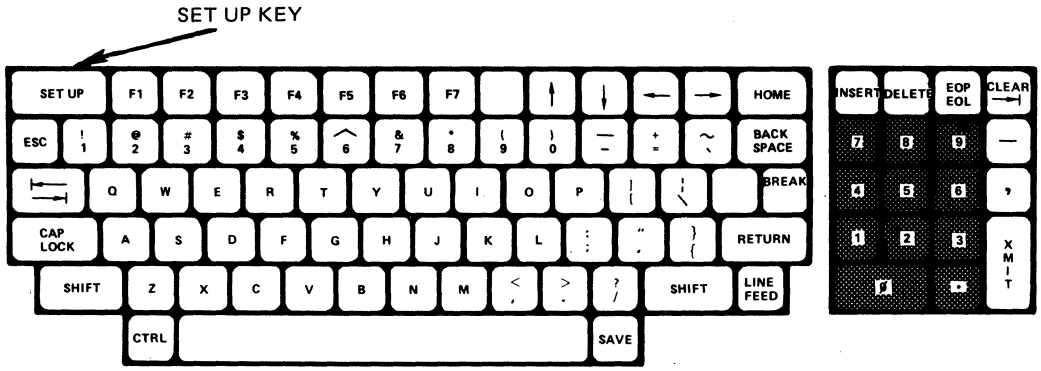
4. Adjust the BRIGHTNESS. Does blinking cursor appear now?



YES	NO

See HELP card.

5. To access CONFIGuration line to prepare for keyboard test, first press SET UP key.



Is CONFIGuration line displayed on bottom line of screen?

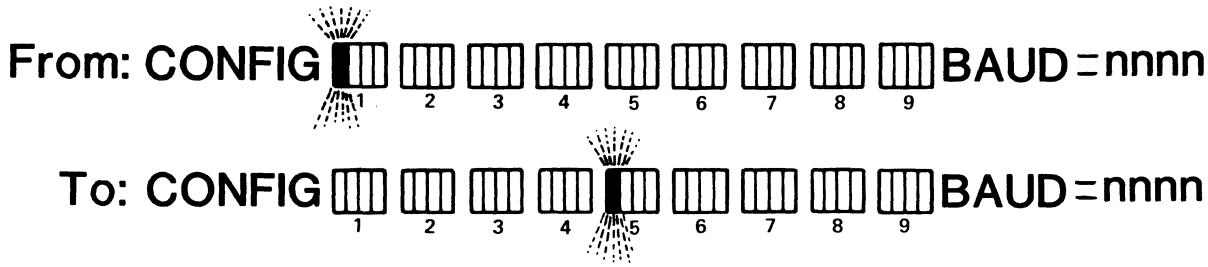
CONFIG 1 2 3 4 5 6 7 8 9 BAUD=nnnn

YES	NO

Ensure keyboard cable is plugged in. Press again. Still NO? See HELP card.

See Step 6.

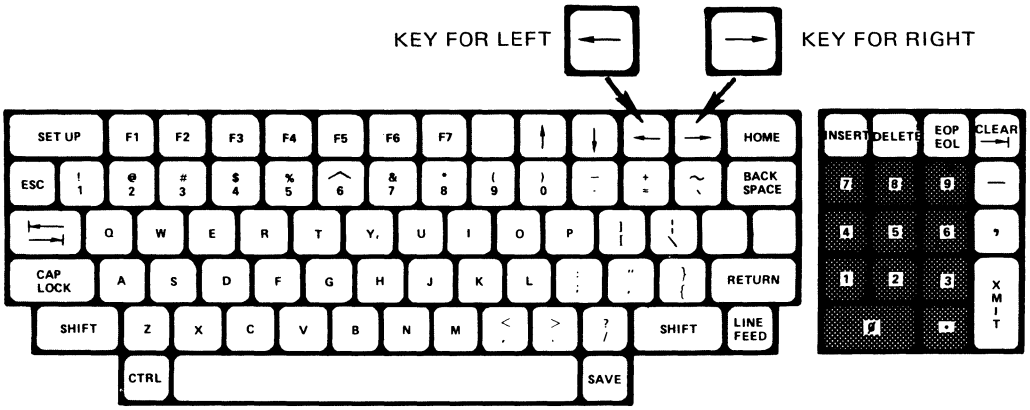
6. Move cursor on CONFIGuration line as shown in diagram.



Press [→] key to move to right.

If cursor is moved too far right, use

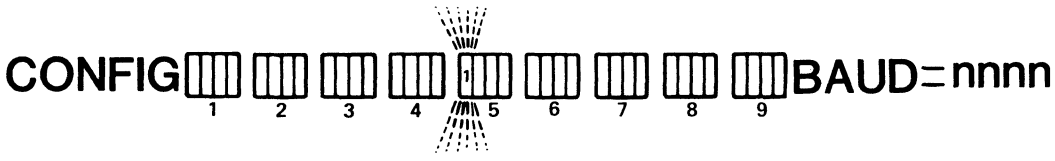
[←] key to move it left.



7. To prepare CONFIGuration line for keyboard test, verify that cursor highlights a 1.

NOTE

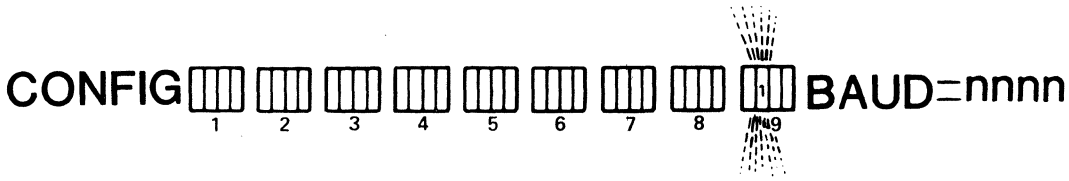
For clarity, other numbers are omitted at this time.



Is a 1 highlighted?

YES	NO
See Step 8.	Press [↑] key. Still NO? See HELP card.

8. Press [→] key to position cursor as shown in diagram.

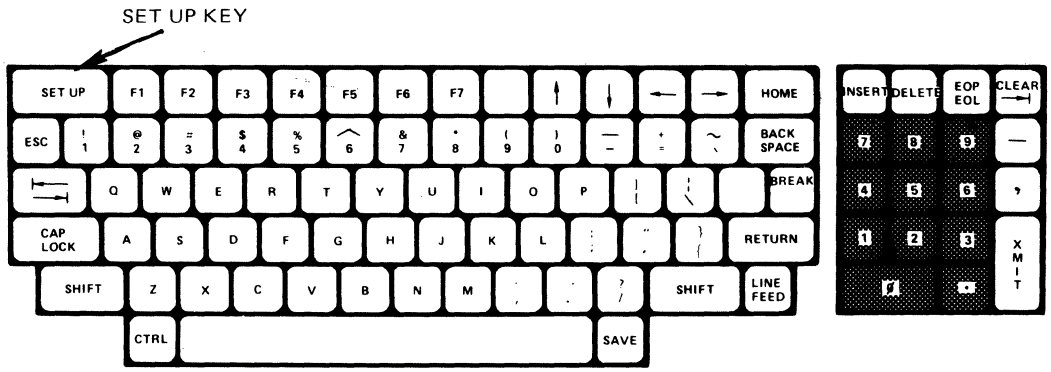


Is a 1 highlighted?

YES | NO

Press [↑] key.
Still NO? See HELP card.

9. Press SET UP key to store CONFIGuration line.



Proceed to Step 10 for KEYBOARD TEST.

10. KEYBOARD TEST: Test every key (except the BREAK key and the two Blank keys) as follows:

NOTE

Should any key(s) malfunction, see Help card.

a. SHIFT TEST:

- Press the A key and see a.
- Press and hold the Left SHIFT key. Press the A key and see A.
- Press and hold the Right SHIFT key. Press the A key and see A.

b. CAP LOCK TEST:

- Press to lock the CAP LOCK key. Press the A key and see A.
- Press to release the CAP LOCK key. Press the A key and see a.

c. CTRL TEST:

- Press and hold the CTRL key. Press the A key and see S_H.

d. REPEAT TEST:

- Press and hold the A key and see aaaaaaaaaaaaaa.

e. TYPING AREA/NUMERIC PAD TEST:

- Press each light gray typing area key and see its appropriate symbol or space displayed.
- Press each black numeric pad key and see the appropriate symbol displayed.

f. TAB TEST:

- Press the ⇤⇥ key and the CLEAR ⇥ key and see H_T displayed for each.

g. FUNCTION/COMMAND KEYS TEST:

- Press the other dark gray keys (listed as follows) and see the appropriate symbol displayed:

KEY	F1	F2	F3	F4	F5	F6	F7	↑	↓	←	→	XMIT
DISPLAY	0	2	6	8	:	<	>	A	B	D	C	i

KEY	HOME	INSERT	DELETE	EOP EOL	CLEAR →	ESC	BACK SPACE	RETURN	LINE FEED
DISPLAY	H	I	P	K	H_T	E_C	B_S	C_R	L_F

11. Reset the CONFIGuration bit:

    a. Press SET UP key.

    b. Use [→] key to position cursor.

    c. Use [↑] key to change bit setting.

    d. Change the CONFIGuration line to appear as shown in diagram.

CONFIG 0011 0100 1010 0110 0111 1000 0011 0111 0010 BAUD=300
1 2 3 4 5 6 7 8 9

12. Press SET UP key. CONFIGuration line disappears.

NOTE

CONFIGuration line characteristics deserve careful study, see Section 3 for details.

13. Three keys remain untested:

- The BREAK Key
- The Blank key to the left of the BREAK key
- The Blank key to the right of the F7 key.

Until your terminal is connected to its Host, you must test these keys by listening to the key click rates. If a key does not click, or clicks at the wrong rate, see the HELP card.

Press and hold down any alphabetic key and hear the normal key click rate. Use this rate as reference for the following tests:

a. Press and hold down a SHIFT key and the BREAK key and hear a key click rate of about 5 times per second (i.e., slower than normal).

b. Press and hold down the Blank key to the left of the BREAK key and hear the normal key click rate.

c. Press and hold down the Blank key to the right of the F7 key and hear the normal key click rate.

14. Press top push button to turn OFF power.

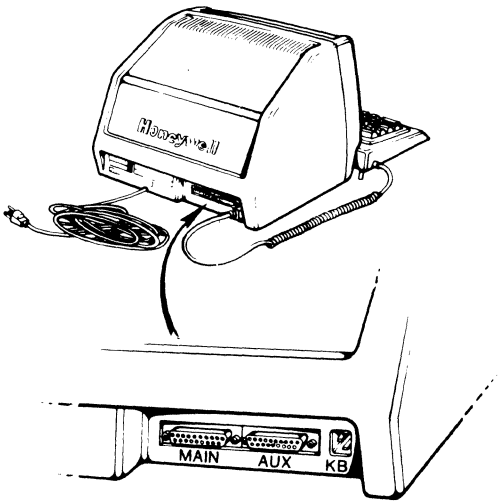
NOTE

After turning power OFF, wait 10 seconds before turning power ON again; this ensures complete reset of the terminal's electronics.

15. After installing communications cable, connect terminal end to MAIN port.

NOTE

Wiring and connection of the terminal end connector is a Customer responsibility.



For a fuller understanding of your terminal's functions, read Section 3 and Section 4. After reading those sections, SAVE THIS MANUAL AND ALL TERMINAL PACKAGING (in case terminal later requires repairs).

Section 3
CONFIGURING THE TERMINAL

The VIP7201 terminal features a selectable display called a Configuration Line, which replaces the mechanical switches normally found on terminals.

The terminal operator can configure the VIP7201 simply by changing the Configuration Line. These changes may be permanent or temporary, depending on the way the line is stored after the changes are made.

3.1 CONFIGURATION LINE

The Configuration Line contains 9 nibbles*, each consisting of 4 bits (bits 3 to 0, from left to right), and the main port baud rate speed. By setting the bits of each nibble to either a 1 or a 0 and identifying the desired baud rate, the operator can select from a variety of terminal modes, communications modes, keyboard features, and visual attributes (as described in Section 4). The format of the Configuration Line is shown in Figure 3-1.

3.2 BASIC OPERATIONAL SETTINGS

Figure 3-2 shows each nibble of the Configuration Line separately. The function for each bit setting (of 0 or 1) within the nibble is then defined. Figure 3-3 lists the baud rates at which the terminal can operate.

By referring to Figures 3-2 and 3-3, the operator determines the bit and baud rate settings that will configure the terminal to his own specifications. Then, following the procedure in subsection 3.5, the operator can set the Configuration Line.

3.3 STANDARD TERMINAL CONFIGURATION LINE

The VIP7201 terminal has a standard Configuration Line that is set by the factory. The standard Configuration Line, displaying this factory setting, is shown in Figure 3-4.

*A nibble is a 4-bit unit — half of a byte.

3.4 DISPLAYING TERMINAL CONFIGURATION

To display the current configuration of the terminal, simply press the SET UP key. The Configuration Line will appear on line 24 of the terminal screen. To return to the screen display, press the SET UP key again.

3.5 SETTING TERMINAL CONFIGURATION

The operator can choose to operate the VIP7201 terminal using the standard factory-selected configuration or change the configuration to meet specific applications.

To change the Configuration Line, perform the following procedure:

1. Press the SET UP key. The screen data will roll up one line and the Configuration Line will appear at the 24th screen line position.

2. Using the cursor left [←] or cursor right [→] key, move the cursor to the position of the bit that you want to change or to the displayed baud rate equal sign (see Figure 3-2 for the bit setting definitions).

3. Press the cursor up [↑] key to change the bit from a 0 to a 1 or from a 1 to a 0. To change the baud rate, press the cursor up [↑] key until the desired baud rate is displayed.

4. Repeat steps 2 and 3 until all changes are completed.

5. Determine whether the changes to the Configuration Line are to be temporary or permanent; that is, whether the new configuration is to be used for only the present application or for long-term applications.

   a. To temporarily store this configuration, press the SET UP key. The new configuration will remain until the terminal is turned off or until the operator changes the Configuration Line again.

   b. To permanently save this configuration, press the SAVE key. The new configuration will remain until the operator changes the Configuration Line, even after the terminal is turned off.

After the appropriate key is pressed, the Configuration Line will disappear, and the data which had rolled off the screen earlier will now return.

NOTE

All keys except the cursor movement, the SET UP, and the SAVE keys are inactive at this time and will cause an alarm to sound if pressed.

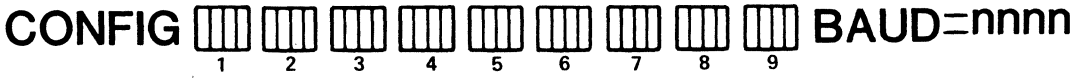
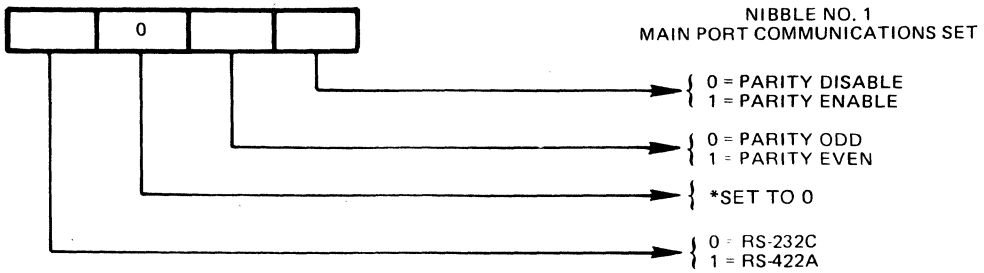
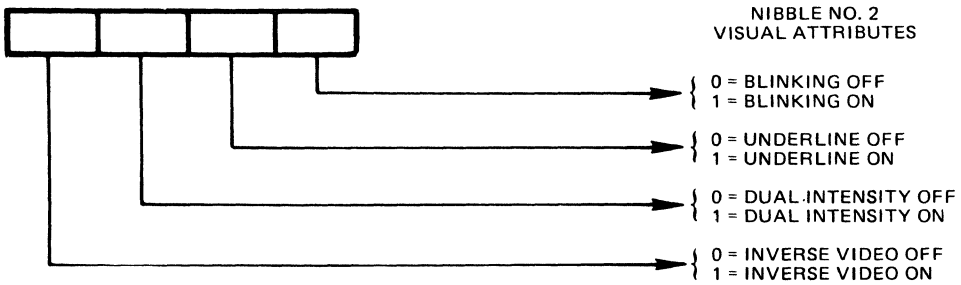


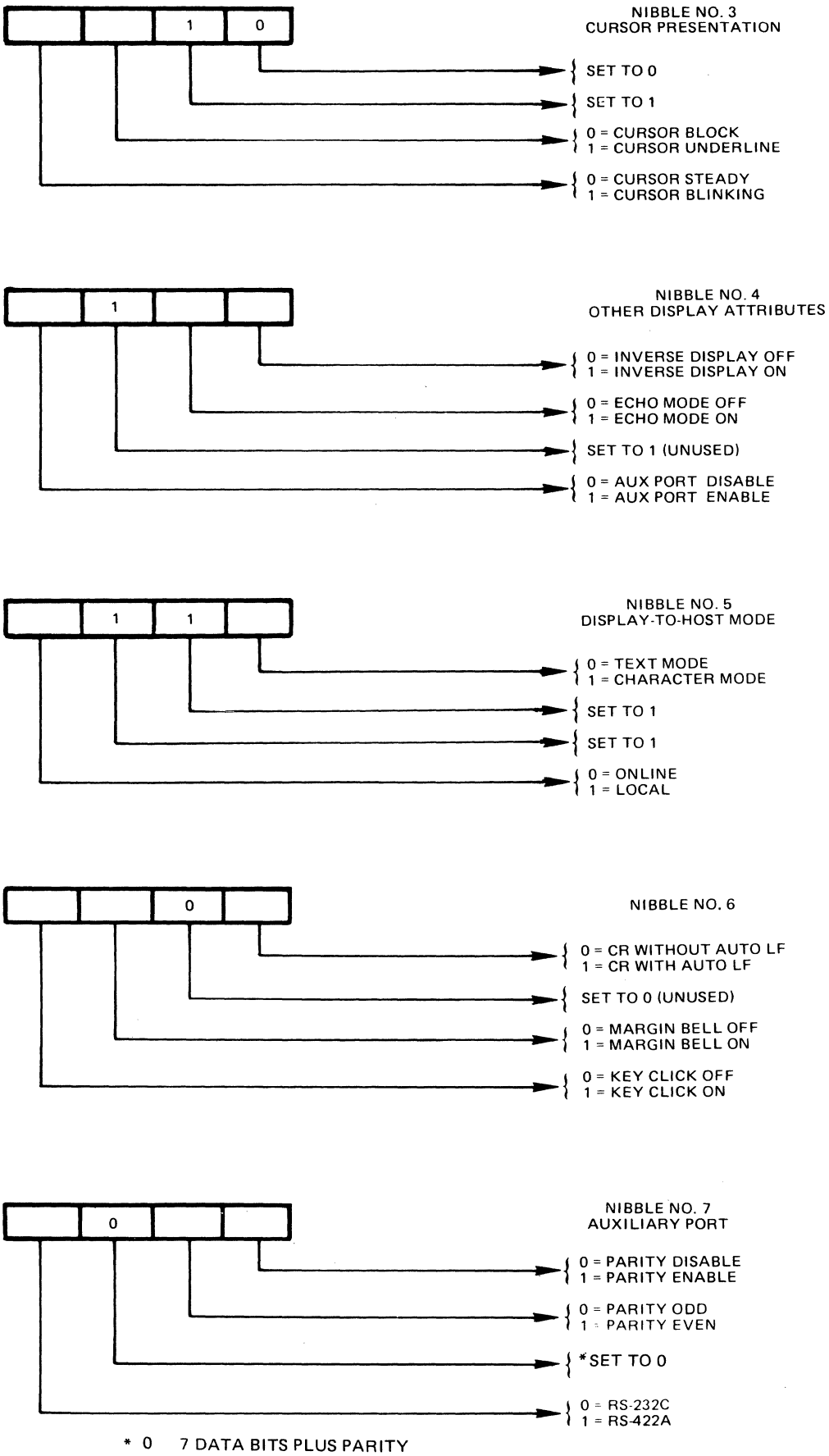
Figure 3-1. Configuration Line Format





* 0 7 DATA BITS PLUS PARITY
1 8 DATA BITS PLUS PARITY

Figure 3-2. Configuration Line Bit Settings (Sheet 1 of 3)



* 0 7 DATA BITS PLUS PARITY
1 8 DATA BITS PLUS PARITY

Figure 3-2. Configuration Line Bit Settings (Sheet 2 of 3)

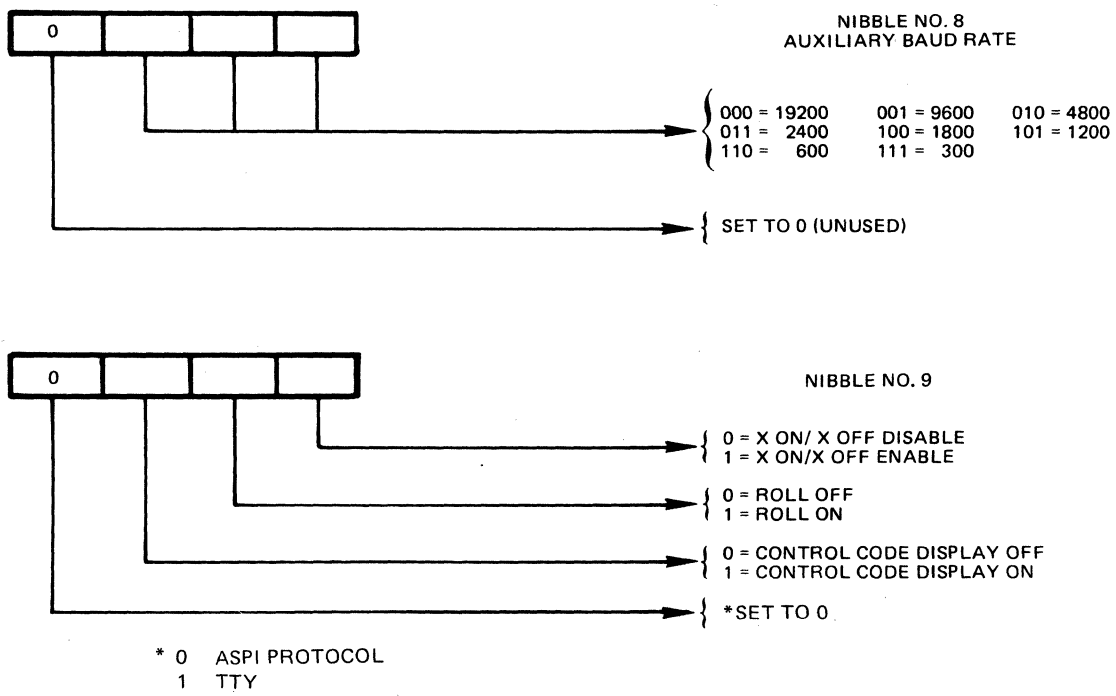
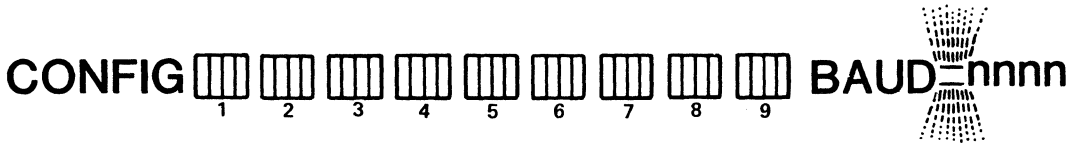


Figure 3-2. Configuration Line Bit Settings (Sheet 3 of 3)



THE VALUES OF nnnn CAN BE CHOSEN FROM THE FOLLOWING LIST
BY PRESSING [↑] UNTIL THE DESIRED RATE IS DISPLAYED:

19200
9600
4800
2400
1800
1200
600
300

Figure 3-3. Configuration Line Baud Rate Settings — Main Port

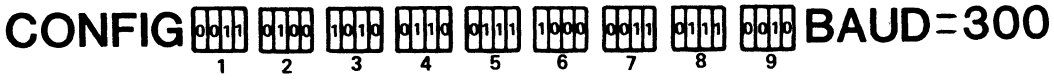


Figure 3-4. Standard Configuration Line

Section 4
BASIC OPERATIONS

The VIP7201 terminal operates in various modes with different display attributes, keyboard features, and communications interfaces. The operator or the host chooses among these features, selects those that meet the requirements of the application, and then sets the Configuration Line to the appropriate bit settings.

This section describes all the VIP7201 terminal features, which can be selected on the Configuration Line (see Figure 3-2 for configuring these features).

4.1 OPERATING MODES

The VIP7201 terminal operates in four modes: Normal, Graphic, Forms, and Monitor. The VIP7201 Display Terminal User's Reference Manual (Order No. CP92-00) provides a complete description of these operating modes. (To obtain copies of CP92-00, refer to the Preface of this Guide.)

Normal operation modes within this terminal are the Character and Text modes. In Character mode, the terminal transmits codes immediately as they are generated by a keystroke. In Text mode, data is transmitted only after the operator presses the XMIT key. (The function keys are an exception to this — they transmit codes immediately). This mode allows the operator to edit and correct data before transmitting it.

4.2 COMMUNICATIONS MODES

In addition to operational modes, there are communications modes that are used in conjunction with the operational modes.

4.2.1 Echo and Non-Echo Modes

The terminal can be set to either the Echo or Non-Echo mode. In Echo mode, codes are sent from the terminal to the host, and the host must echo them back before the terminal acts upon them. In Non-Echo mode, codes are both transmitted and acted upon directly by the terminal, without the host echoing codes back to the terminal.

4.2.2 Local and Online Modes

The terminal also operates in either the Local or Online mode. In Local mode, communications lines are ignored and keyboard entry is to the display unit only. Host sequences, consequently, are ignored. In Online mode, codes are sent to the host and received from the host.

4.3 VISUAL ATTRIBUTES

At configuration time, one of or one combination of the following visual attributes can be defined for each location on the screen:

- Inverse Video
- Blink
- Underline
- High or Low Intensity

Once defined, only that attribute or combination may be assigned or not assigned to each individual displayable character by the host application software. For example, if the combination Inverse Video and Blink is configured, each displayable character will either have no visual attribute associated with it or it will be displayed in inverse video and will be blinking.

4.3.1 Inverse Video by Character

Normally, data is displayed in green characters on a dark background. In inverse video by character, characters will be displayed within a block on a green background.

4.3.2 Inverse Video by Screen

Normally, data is displayed in green on a dark background. In inverse video by screen, the reverse is true — data is dark and the background is green for the entire screen.

4.3.3 Dual Intensity

Normally, data is displayed in high intensity. The option exists, however, to display the data in low intensity.

4.3.4 Blinking or Underlined

Data can be displayed as blinking or steady. Data can be displayed with or without underlines.

4.3.5 Cursor Display

The cursor can be displayed either as steady or blinking. The cursor can be either an underline or an inverse video block.

4.3.6 Control Code Display

Control codes entered at the keyboard can either be displayed on the screen and cause no action or not displayed on the screen and cause some action. Control code display is limited to program development.

4.4 OTHER SCREEN AND KEYBOARD FEATURES

The operator can select or inhibit the following features by setting the Configuration Line.

4.4.1 Margin Bell

When the cursor moves in the forward direction through the 72nd column of any line, a beep will sound to warn that the operator is approaching the end of the line.

4.4.2 Roll

If a display ASCII code is received at the last character position of the bottom line (line 24) and Roll mode is enabled, the screen data moves up one line, the top line is lost, and the cursor moves to column 1 of the new blank bottom line. If in Non-Roll mode, the data character will be ignored and an alarm will sound. Also, the LF command will not operate and an alarm will sound.

4.4.3 Key Click

The key click is used to simulate typewriter sounds each time a key is pressed. In addition, a click will sound each time a code is sent when the Auto-Repeat feature is in effect. This is especially useful in Echo operation to ensure that a key was pressed.

4.4.4 CR/Auto-LF

Normally, the RETURN key causes the cursor to move to column 1 of the same line. If Auto-LF is enabled, the cursor will advance to column 1 of the next line.

4.4.5 Keyboard Lock

The host can lock the keyboard. When the keyboard is locked, no keystrokes are honored by the terminal except the BREAK key. The function keys are still active.

The operator may unlock the keyboard by pressing the SET UP key twice in succession.

4.4.6 Auto-Repeat

An Auto-Repeat feature allows a key to be entered multiple times up to 15 characters per second.

4.5 COMMUNICATIONS INTERFACES

4.5.1 Main Communications Port

The main communications port uses an EIA RS-232C or RS-422A voltage interface.

4.5.1.1 Parity

When parity is enabled, the parity bit of each transmitted character is set, and a parity check is done on received data. When a parity error occurs, the wrong character is displayed, but it follows the parity error pattern. When parity is disabled, the parity bit of each character is set to 0 and no parity check is done on received data.

If even parity is selected, even parity is checked for on received data and generated for outgoing data. If odd parity is selected, odd parity is checked for on received data and odd parity is generated for outgoing data.

4.5.1.2 Data Transmission

The terminal communicates with the host using serial 7-bit ASCII code plus a parity bit. Each transmitted character is preceded by a start bit or followed by a stop bit. Received characters must have the same number of bits; however, additional stop bits are allowed.

4.5.1.3 X ON/X OFF

If the X ON/X OFF feature is enabled and the terminal's communications line buffer (FIFO) approaches the full state, the terminal will transmit a DC3 code (hexadecimal 13) to the host. The host, as a result, should stop sending data. As the terminal continues to process characters out of the buffer, and thus begins to approach the empty state, the terminal will signal the host by transmitting a DC1 code (hexadecimal 11) to resume data transmission. The terminal will recognize a DC3 and DC1 code from the host and respond similarly if the terminal is transmitting in Text mode. Note that a DC3 will lock the terminal and the keyboard. If this feature is disabled, the terminal will not generate or recognize DC3 or DC1 codes.

Pressing the SET UP key will send a DC3, if this feature is enabled. Then, pressing the SET UP (or SAVE) key again will send a DC1 (see subsection 4.4.5 on unlocking the keyboard).

4.5.1.4 Baud Rates

Any one of the following communications speeds can be selected for the main port:

19200
9600
4800
2400
1800
1200
600
300

4.5.2 Auxiliary Port

In addition to the main communications port, the VIP7201 terminal has an auxiliary port, which also uses a limited EIA RS-232C or RS-422A voltage interface to allow attachment to local peripherals. This port also has the X ON/X OFF feature (refer to subsection 4.5.1.3).

4.5.3 Screen Data to Printer

The Aux Port will control the printer when dumping data from the screen, i.e. CR, LF, and 9 DEL codes after each line (called TTY). The Aux Port will support ASPI Protocol for the screen dump.

SSPD HARDWARE PUBLICATIONS
USER COMMENTS FORM

DOCUMENT TITLE: Setup Guide for VIP7201 Display Terminals

PART NO.: _____

ORDER NO.: CP91-00

ERRORS:

HOW DO YOU USE THIS DOCUMENT?

THEORY _____ ☐

MAINTENANCE ____ ☐

TROUBLESHOOTING ☐

OTHER: _____

_____

DOES THIS MANUAL SATISFY YOUR REQUIREMENTS?

YES ☐ NO ☐

IF NOT, PLEASE EXPLAIN _____

_____

_____

FROM: NAME _____ DATE _____

TITLE _____

COMPANY _____

ADDRESS _____

PLEASE FOLD AND TAPE–
NOTE: U. S. Postal Service will not deliver stapled forms

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 39531 WALTHAM, MA02154

POSTAGE WILL BE PAID BY ADDRESSEE

HONEYWELL INFORMATION SYSTEMS
200 SMITH STREET
WALTHAM, MA 02154

ATTN: PUBLICATIONS, MS872A

FOLD ALONG LINE

FOLD ALONG LINE

CUT ALONG LINE

Honeywell

THIS IS A **HONEYWELL**

CUSTOMER ASSISTED MAINTENANCE PROGRAM (CAMP) PRODUCT

CABINET SERIAL NUMBER _____

HELP AND INFORMATION

Once you have identified a faulty unit or are in need of assistance, determine the steps you need to follow according to your service agreement with Honeywell. Identify your contract type before calling.

STANDARD MAINTENANCE CONTRACT (NOT CAMP CONTRACT)

After you have found that a unit is faulty, call the HELP telephone number that applies to your area. The National Response Center (NRC) will arrange for a Honeywell Customer Service Engineer to contact you to provide assistance. If necessary, the Engineer will be dispatched to service your unit.

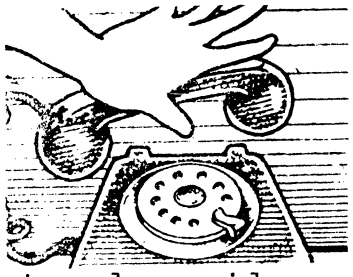
CUSTOMER ASSISTED MAINTENANCE PROGRAM CONTRACT

When you have identified the faulty unit, use the Repair Authorization Form to return the unit to Honeywell for repair or replacement. Package the unit in the same materials in which it was shipped. If you require additional assistance or information, you may call the HELP telephone number and arrangements will be made for the proper Honeywell organization to contact you.

NON-MAINTAINED CUSTOMER

Even though you have no maintenance agreement with Honeywell, you can still call the HELP telephone number and the NRC will arrange for the proper Honeywell organization to contact you to answer your questions on service alternatives.

National Response Center
HELP telephone numbers:



Outside Georgia:	800-241-1634
Georgia:	800-282-4350
Atlanta Only:	404-982-3066

When you call, please state that this is a CAMP product and provide the serial number of the CAMP customer replaceable unit.

To order supplies or additional units, refer to the National Distribution Center Catalogue and call the number that applies to your area.

National Distribution Center:

Outside Massachusetts:	800-343-6665
Within Massachusetts:	617-392-5246