Data Communications Pac
Quick Reference Card
For Use With the HP-71

Data Communications Pac Commands
Main Menu Commands

C   Change to Another Setup File

Displays the current setup file and prompts you to enter the name of the setup file that is to become current. Press [END LINE] to retain the displayed file as the current setup file, or [f] [/] to abort the command

D   Dial a Phone Number

Prompts you to enter a phone number or the phone code of the desired number. Press [END LINE] to enter terminal mode or [f] [/] to abort the command.

E   Enter Edit Mode

Places DATACOMM in edit mode and displays the edit mode menu. Prompts you to enter an edit mode command letter (ACDLQ?). Press [Q] to exit the editor.

F   Execute a Command File

Prompts you to enter the name of the command file which you want to executek. Press [END LINE] after the name to execute or press [f] [/] to abort.

H   Hang Up

Disconnects the signal between the modem and the host computer. Press [f] [/] to exit terminal mode, then [H].

L   Toggle the HP-71 Display On/Off

Turns output to the HP-71 display on and off. When the HP-71 display is on, the 500-character data buffer is activated and the data transmission is noticeably slower.

P   Toggle the Printer On/Off

Turns output to the system printer on and off.

Q   Quit DATACOMM

Terminates the data communications system and returns to the HP-71 prompt. Does not turn off the HP 82168A Acoustic Coupler.

S   Send a Special Code Word Sequence

Prompts you to enter a predefined special code word and then sends the sequence defined by the code word to the modem. Press [END LINE] to execute and [f] [/] to abort the command.

T   Enter Terminal Mode

Puts the system in terminal mode and allows you to communicate directly with the connected computer via the modem. Press [f] [/] to exit terminal mode (this does not disconnect the communication to the host computer). While the HP-71 display is on, use the following keys to control the display of incoming data.

[f]	[9]	Toggles between scroll mode (continuous scrolling characters) and line mode characters displayed in 22-character windows).
[f]	[*]	Select the display buffer for review.

While the inflow of data is halted, use the following keys to review the contents of the input buffer.

[∧]		Move up one line.
[∨]		Move down one line.
[g]	[∧]	Move to top of file.
[g]	[∨]	Move to bottom of file.
[>]		Move window right one character.
[<]		Move window left one character.
[f]	[>]	Move window right 15 characters.
[f]	[<]	Move window left 15 characters.
[g]	[>]	Move window right to end-of-line.
[g]	[<]	Move window left to beginning of line.

To send a text file to a host computer or to receive a text file from a host system without exiting terminal mode, select one of the following.

[f]	[5]	Prompts you to choose between inputting or outputting a file. If outputting a file, you will be prompted for the file name. If you are inputting a file, the file will be appended to the previously saved file. If no file has been saved to during this session with DATACOMM, you will be prompted for a file name.
[f]	[6]	Prompts you to choose between inputting or outputting a file. It then prompts you for the file name. When inputting a file, this command does not append to a previously opened file, but will overwrite it if given an existing file name.

While in terminal mode, the following control sequences may be sent to the host.

[f]	[H]	Causes a backspace (BS).
[f]	[J]	Causes a line feed (LF).
[f]	[M]	Causes a carriage return (CR).
[f]	[Q]	Sends a control Q (the most common XON character). This resumes data flow.
[f]	[S]	Sends a control S (the most common XOFF character). This halts data flow.

[f]	[1]	You will be prompted to enter the decimal CHARACTER NUMBER of the character which you wish to send. If you enter 65 an A will be sent. This is useful for sending characters which do not exist on the HP-71 keyboard.
[f]	[7]	Sends an ESCAPE character.
[f]	[8]	Sends a BREAK sequence.

U   Call a User Subprogram

Prompts you to enter the name of the subprogram which you wish to run. When the subprogram is finished executing, control will return to DATACOMM.

V   Toggle the Video Display On/Off

Turns output to the video display on and off.

X   Transfer Files

Prepares system to transfer, prompts if file is input or output, and prompts for the file name of HP-71 text file being sent or HP-71 text file name for received data. Press [END LINE] to execute or [f] [/] to abort command.

?   Help

Prompts you to enter the desired main menu command letter (CDEFHLPQSTUVX?) and then displays a short description of the selected command. Press [f] [/] to abort the command.

The Edit Mode Commands

A   Add a Code Word

Prompts you to enter the new code word and the data to be associated with the new word. Press [END LINE] to execute or [f] [/] to abort the command.

C   Change a Code Word

Prompts you to enter the code word you want to change, then displays the data associated with that code word. Use the HP-71 line-editing keys (listed under the edit mode L command in this guide), to change the data. Press [END LINE] when the changes are complete.

D   Delete a Code Word

Prompts you to enter the name of the code word to be deleted and removes that code word and its data from the setup file. Press [END LINE] and [Y] to execute or answer [N] if you do not wish to delete a particular code word.

L List the Contents of the Setup File

Displays the first line of the setup file. Use the following cursor keys to view the file.

[∧]		Move up one line.
[∨]		Move down one line.
[g]	[∧]	Move to top of file.
[g]	[∨]	Move to bottom of file.
[>]		Move window right one character.
[<]		Move window left one character.
[f]	[>]	Move window right 15 characters.
[f]	[<]	Move window left 15 characters.
[g]	[>]	Move window right to end-of-line.
[g]	[<]	Move window left to beginning of line.

Q Quit the Editor

Exits edit mode and returns to the main menu.

? Help

Prompts you to enter the desired edit mode command letter (ACDLQ?) and then displays a short description of the selected command. Press [f] [/] to abort the command.

Special code words

The following commands require previously prepared code words in the setup file: D (DIAL), H (HANGUP), and S (special code words).

Special code words can be defined for almost any sequence of characters and numbers. When you define a special code word, the code word and data are added to the end of the current setup file. The general format for code words and data is:

code word*data

The combined length of the code word, plus the asterisk and the data can be up to 96 characters long.

The following is a list of the special setup characters that you can use in the data portion of code words:

Character	Function
!R	Enables remote mode. Remote mode is used to send command characters directly to devices on the HP-IL loop.
!N	Disables remote mode and returns the device to local mode. Be sure to terminate a data string with !N if !R was used in the string.
!P	Inserts the telephone number entered with the main menu D (Dial) command into the data string of the DIAL code word.

!E	Inserts an escape character (decimal 27) into a data string. This is often used for initializing peripheral devices. Refer to the owner's manual of the device for more information.
!∧	Inserts a caret ("∧") into a data string.
!!	Inserts an exclamation point ("!") into a data string.
!/	Inserts a comma into a data string. Do not use a regular comma (,) in a data string.
∧char	Inserts a control character into the data string. The character following the ∧ will be inserted into the string as a control character. For example, ∧R inserts a control R sequence into the string.
∧M	Inserts a carriage return (control M) into the data string.
∧J	Inserts a line feed (control J) into the data string.
!W char	Causes DATACOMM to wait for the "char" to be received before sending the next character in the data string. For example !WA causes DATACOMM to wait until it receives an "A" from the host computer before it sends the next character in the data string. Multiple characters can be concatenated. For example, !WA!WB will cause a wait for the sequence "AB".
!0	Causes a 200-millisecond pause to occur before the next character in the data string is sent.
!1	Causes a 1-second pause to occur before the next character in the data string is sent.
!2	Causes a 2-second pause to occur before the next character in the data string is sent.
!8	Causes an 8-second pause to occur before the next character in the data string is sent.

NOTE: Some devices require a pause before sending additional commands. For example, the four delay characters (!0, !1, !2, !8) can be used to put in a wait time for an auto dial modem. The delay characters can be issued as many times as necessary to obtain the desired wait time.

System Initialization Procedure

The following is an outline of the procedure to initialize your data communications system. Once you have followed this procedure and have modified the setup file to match your system, the procedure should be repeated only if you change a component in your system.

1. Specify the devices (modem, printer, video display) on the HP-IL loop which will be used by DATACOMM.

2. Specify special initialization commands required by the devices to work with various host systems. (For example, setting the baud rate required for your modem.)

3. Define the display devices and their on/off status in terminal mode.

4. Define the "echo" default value.

5. Define the auto line feed default status.

6. Define the characters DATACOMM will send to the host computer system for controlling data flow (XON/XOFF).

7. If you are using an auto dial modem, you must define the character sequences it requires to dial a number and to hang up.

8. Define the host computer's BREAK command sequence.

9. Define the PROMPT character(s).

10. Setting the default TIMER value.

11. Making host dependent setup file changes.