HEPAX Advanced Functions

Function	Description
CLRAM	Clears a whole or part of a 4K block of HEPAX memory.
CODE	Codes the hexadecimal string in the ALPHA register and places result in the X register.
COPYROM	Copies a whole or part of a 4K block of system memory to HEPAX RAM.
DECODE	Decodes the contents of the X register and places result in the ALPHA register.
DECODYX	Decodes a number of nybbles as DECODE.
DISASM	Disassembles HP-41 M-code.
"DISSST"	FOCAL program that disassembles HP-41 M-code line by line. Program listing on page 67 in the Owner's Manual.
HEXEDIT	Edits HEPAX memory word by word.
HPROMPT	Prompts for a number of hexadecimal digits.
"JUMP"	FOCAL program that calculates HP-41 M-code absolute jump instructions. Program listing on page 127 in the Owner's Manual.
RAMTOG	Toggles write protection status of a ROM image.
READROM	Reads a number of ROM images from Mass Storage.
WRTROM	Writes a number of ROM images to Mass Storage.

The HEPAX Multi-function

To execute a HEPAX multi-function, execute the HEPAX function and enter the multi-function number or execute the HEPAXA function and press ALPHA, enter the multi-function name and press ALPHA.

Name	Number	Function
AND	001	Logical X AND Y.
BCAT	002	Block catalog.
BCD-BIN	003	Converts number in X from BCD to binary.
BIN-BCD	004	Converts number in X from binary to BCD.
CTRAST	005	Sets display contrast ("Halfnut" calculators only).
DELETE	006	Works like DELETE of the hexadecimal editor.
INSERT	007	Works like INSERT of the hexadecimal editor.
NOT	008	Complement of X.
OR	009	Logical X OR Y.
ROTYX	010	Rotates Y register X nybbles.
SHIFTYX	011	Shifts Y register X bits.
XOR	012	Logical X exclusive-or Y.
X+Y	013	Bitwise addition.
X-$	014	Converts X register to alpha string.
Y-X	015	Bitwise subtraction.

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HEPAX Module
Quick Reference Card

File System Functions

Function	Description
HAPPCHR	Appends the characters in the ALPHA register at the end of the record at the pointer in the current HEPAX text file.
HAPPREC	Appends the contents of the ALPHA register as a new record at the end of the current HEPAX text file.
HARCLRC	Appends the record at the pointer in the current HEPAX text file to the ALPHA register.
HASROOM	Returns the number of characters left in a HEPAX text file.
HCLFL	Clears the contents of a HEPAX data or text file. The file is not deleted.
HCRFLAS	Creates a HEPAX text file.
HCRFLD	Creates a HEPAX data file.
HDELCHR	Deletes a number of characters from the current HEPAX text file, starting at the pointer.
HDELREC	Deletes the record at the pointer from the current HEPAX text file.
HEPDIR	Lists all files in the HEPAX file system.
HEPDIRX	Lists one files in the HEPAX file system.
HEPROOM	Returns the number of registers available in the HEPAX file system.
HFLSIZE	Returns the size of a HEPAX file.
HGETA	Recalls the contents of entire calculator main memory from a HEPAX "write-all" file.

HGETK	Recalls system key assignments from a HEPAX key assignment file.
HGETR	Recalls the contents of all main memory data registers from a HEPAX data file.
HGETREC	Replaces the contents of the ALPHA register with the record at the pointer in the current HEPAX text file.
HGETRX	Recalls the contents of a block of main memory data registers from a HEPAX data file.
HGETX	Recalls the contents of the X register from a HEPAX data file at the pointer.
HINSCHR	Inserts the characters in the ALPHA register at the pointer in the current HEPAX text file.
HINSREC	Inserts the contents of the ALPHA register as a new record before the record at the pointer in the current HEPAX text file.
HPOSFL	Returns the location of the first occurrence of the string in the ALPHA register after the pointer in the current HEPAX text file.
HPURFL	Purges (deletes) a HEPAX file.
HRCLPT	Recalls the pointer(s) from the current HEPAX data or text file.
HRCLPTA	Recalls the pointer(s) from any HEPAX data or text file, or the file size of any other file type.
HREADFL	Read a HEPAX file from Mass Storage.
HRENAME	Renames a HEPAX file.
"HRESZFL"	FOCAL program that resizes data or text files. Program listing on page 30 in the Owner's Manual.

HSAVEA	Saves the contents of entire calculator main memory in a HEPAX "write-all" file.
HSAVEK	Saves system key assignments in a HEPAX key assignment file.
HSAVEP	Saves a program in main memory in HEPAX memory.
HSAVER	Saves the contents of all main memory data registers in a HEPAX data file.
HSAVERX	Saves the contents of a block of main memory data registers in a HEPAX data file.
HSAVEX	Saves the contents of the X register in the current HEPAX data file.
HSEC	Secures a HEPAX file against accidental loss.
HSEKPT	Sets the pointer(s) in the current HEPAX data or text file.
HSEKPTA	Sets the pointer(s) in any HEPAX data or text file.
HUNSEC	Unsecures a HEPAX file.
HWRTFL	Writes a HEPAX file to Mass Storage.
PRIVATE	Makes a program in HEPAX private.

The Extended Functions Multi-function

To execute an Extended Functions Multi-function, execute the XF function and enter the multi-function number or execute the XFA function and press ALPHA, enter the multi-function name and press ALPHA.

Name	Number	Description
ALENG	000	Returns the length of the string in ALPHA.
ANUM	001	Converts the string in ALPHA to a numerical value in X.
AROT	002	Rotates contents of ALPHA.

ATOX	003	Converts a character in ALPHA to a character code in X.
CLKEYS	004	Clears all key assignments.
CLRGX	005	Clears registers as specified by X.
GETKEY	006	Gets keycode depending on key pressed.
GETKEYX	007	Gets keycode within time specified by X.
PASN	008	Programmable assignment.
PCLPS	009	Programmable clear programs.
POSA	010	Finds position of string or character in ALPHA
PSIZE	011	Programmable SIZE.
RCLFLAG	012	Recalls the status of user flags 00-43.
REGMOVE	013	Moves a block of main memory data registers.
REGSWAP	014	Swaps two blocks of main memory data registers.
ΣREG?	015	Returns the location of the statistical registers.
SIZE?	016	Returns the current SIZE.
STOFLAG	017	Restores the status of user flags 00-43.
X<>F	018	Exchanges the status of user flags 0-7 with the X register.
XTOA	019	Converts character code in the X register to a character in the ALPHA register.
X=NN?	020	Compares X with indirect Y.
X≠NN?	021	Compares X with indirect Y.
X<NN?	022	Compares X with indirect Y.
X<=NN?	023	Compares X with indirect Y.
X>NN?	024	Compares X with indirect Y.
X>=NN?	025	Compares X with indirect Y.