



# HP41CX Program Listing

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Title:	System management
Program Label:	LBL "SYSCX" / 249 bytes
Version:	1.0
Date:	10/03/1989

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## Description

This program is used to set defaults and manage extended memory in the HP41CX.

There are four categories that this program addresses:

- **Reset:** Status of flags, stopping the stopwatch, setting time and date prefs.
  - Uses the **STOFLAG** function to restore a previously saved copy of flags 00-43
- **Video:** Status of the flags that control the video interface.
- **Extended:** Recall of program files from extended memory and launcher.
- **Purge:** Purge files from extended memory by name.

Assigning **SYSCX** to a key makes it easy to manage these aspects of the machine's behaviour any time.

## Core Logic

### Reset

To enable the operation of the Reset functionality, you need to have an extended file called "**RST**" which contains the status of the flags 00-43 as you like to have them in their default state.

Create the file by entering **1** in the X reg, **RST** in the Alpha reg. and executing **CRFLD**.

To ensure the file pointer is set correctly, **CLX** and execute **SEEKPTA**.

Set the flags according to your preferences (take care if flags are being used by other programs) and execute **RCLFLAG** to place their states in the X reg. (The display of the status data is meaningless).

Execute **SAVEX** to copy the status data to the extended file **RST**.

### Video

You need to have the video interface connected for the effects to the flag settings to be apparent.

### Purge

You cannot undo the purging of a file!

## Execution

When executed, the program displays the four options:

### RS, V, EX, PUR

Touch the key corresponding to the first letter of the option and the program will prompt you accordingly.

### Reset

The program will proceed and restore the flag settings saved previously in the extended file **RST** and set the preferences you encoded for the time and date.

### Video

Touch **Y** or **N** in response to the **CURS: ON?** prompt and the cursor will be displayed or not.

Touch **Y** or **N** in response to the **CURS: IN/REP?** prompt and the cursor will change to the insert (arrow) or replace (block) form.

### Extended

At the prompt, enter the program file name that you want to recall from extended memory and in response to the **RUN PROG?** prompt you can touch **R/S** to run the program you just recalled.

### Purge

At the prompt, enter the extended file name that you want to delete.

A list of the contents of extended memory will then be displayed. You can stop it at any time by touching **R/S**, speed it up by holding down any key other than **R/S** or **ON**. When the listing is stopped you can use **SST** and **BST** to move through the list one file at a time.

This program uses the **QA** subroutine to prompt the user. You can find it on the IE site at: <http://www.inventors-emporium.co.uk> and follow the links to the HP41CX.

*Program listing follows:*



Line	Instruction	Comments
1	<b>LBL</b> "SYSCX"	
2	"10/3/89 V1"	
3	CF 16	
4	CF 15	
5	FS? 55	
6	CF 21	
7	CF 27	
8	"RS,V,EX,PUR"	Touch the key corresponding to the first letter of the process.
9	AVIEW	
10	STO 00	
11	<b>LBL</b> 00	
12	TONE 6	
13	GETKEY	
14	X=0?	
15	↑ <b>GTO</b> 00	Loops back if no key is pressed.
16	→ <b>GTO</b> IND X	Branches to the appropriate label.
17	<b>LBL</b> 43	Purge extended memory file: Called by touching <b>P</b> key
18	"PURGE WHAT?"	
19	AON	
20	<b>PROMPT</b>	
21	AOFF	
22	PURFL	Purges (deletes) a file from extended memory
23	"GADA"	Some existing file that is kept in main memory
24	FLSIZE	Defines a new current file
25	EMDIR	Lists the contents of extended memory
26	↓ <b>GTO</b> 10	
27	<b>LBL</b> 52	Reset: Called by touching <b>R</b> key
28	"*RESET*"	
29	AVIEW	
30	"RST"	
31	CLX	
32	SEEKPTA	
33	GETX	
34	STOFLAG	Sets flags <b>0 0</b> to <b>4 3</b> from the contents of the <b>RST</b> data file
35	CLA	
36	AOFF	
37	STOPSW	
38	CLK12	
39	CLKTD	
40	↓ <b>GTO</b> 10	

Line	Instruction	Comments
41	<b>LBL 62</b>	Video: Called by touching <b>V</b> key
42	FC? 55	
43	↓ <b>GTO 10</b>	
44	0.71	
45	"CURS: ON?"	Enter <b>Y</b> or <b>N</b>
46	← <b>XEQ "QA"</b>	
47	SF 21	
48	27	
49	ACCHR	
50	FS? 00	
51	62	
52	FC?00	
53	60	
54	ACCHR	
55	CF 21	
56	FC?C 00	
57	↓ <b>GTO 10</b>	
58	0.24	
59	"CURS: IN/REP?"	Choose <b>I</b> nsert or <b>R</b> eplace cursor mode
60	← <b>XEQ "QA"</b>	
61	SF 21	
62	27	
63	ACCHR	
64	FS? 00	
65	81	
66	FC?C 00	
67	82	
68	ACCHR	
69	↓ <b>GTO 10</b>	
70	<b>LBL 15</b>	Extended memory program file: Called by touching <b>E</b> key
71	"FILE NAME?"	
72	AON	
73	<b>PROMPT</b>	
74	AOFF	
75	ASTO 12	
76	GETSUB	
77	"RUN PROG?"	
78	TONE 4	
79	<b>PROMPT</b>	
80	→ <b>GTO IND 12</b>	

Line	Instruction	Comments
81	<b>LBL10</b>	
82	RCL 00	
83	FS? 55	
84	SF 21	
85	CLD	
86	<b>END</b>	

For more HP41CX programs, visit <<http://www.inventors-emporium.co.uk>>

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