

HP 82402A Dual HP-IL Adapter Owner's Manual Addendum

This addendum contains updating information for the *HP 82402A Dual HP-IL Adapter Owner's Manual*, part number 82402-90002, dated November, 1985.

Page 2-3, under DEVICE SPECIFIER: The *device specifier* must include the loop number at the end if the intended loop number is other than 1.

Page 2-4, under LOOP NUMBER: The *loop number* is a positive number or numeric expression which is rounded to an integer.

Page 2-4, under HP-IL INTERFACE COMMANDS: The following keywords do not accept a loop number parameter. (These keywords are not listed in the manual.)

- Keywords applying only to LOOP 1: ASSIGN IO and LIST IO.
- Global keywords which apply to all loops at the same time: OFF IO, ON INTR, and OFF INTR.

After executing OFF IO, all loops are disabled. If a subsequent RESTORE IO is executed, loop #1 is assumed unless the loop number is specified.

Page 2-7, under DEVADDR: The first two examples should read:

```
A=DEVADDR("PRINTER(2):2") @ PRINTER IS A:2  
B=DEVADDR("%16:2") @ COPY FILE1 TO :B:2
```

Page 2-7, under OUTPUT: The syntax should read:

OUTPUT

```
OUTPUT { dev spec | LOOP [ :loop# ] } [ USING { string | line# } ] ; expr [ { , | } expr... ] [ ; ]
```

HP-IL Version 1A Limitations

The first release of the HP 82401A HP-IL Module (VER\$="HPIL:1A") contains limitations on the operation of the HP-71 with multiple loops. If a more recent revision of the module is LOOP 1 (lower adapter slot), such as the 1B release, these limitations will not apply.

Limitation 1.

Some keywords do not allow the HP-71 to talk to two loops in the same statement. These keywords are CAT#, READDOC, READINTR, and STATUS. The work around is to split the functions among two statements.

```
10 PRINTER IS PRINTER:1 @ PRINT CAT#(N,":TAPE:2")
```

can be replaced by:

```
10 PRINTER IS PRINTER:1 @ A#=CAT#(N,":TAPE:2") @ PRINT A#
```

Limitation 2.

With the keywords ENABLE INTR and REQUEST, if a loop number is used, it must be a constant or a variable. More complicated numeric expressions may reset memory or lock up the HP-71. For example:

```
ENABLE INTR FNN(A) can be replaced by: A1=FNN(A) @ ENABLE INTR A1  
REQUEST VAL(A#) can be replaced by: A=VAL(A#) @ REQUEST A
```

Limitation 3.

If loop #1 has data available, higher numbered loops cannot interrupt the HP-71. This can occur if loop 1 is *not a system controller*. Consider the following code segment:

```
100 ON INTR GOTO 1000  
110 ENABLE INTR 2; 8  
120 SEND 2; IDY @ GOTO 120
```

If the system controller for loop 1 sends data to the HP-71 while the program is executing line 120, the ON INTR branch will not be taken. One work around is to configure the system so that loops which are not system controllers have higher numbers than loops that are system controllers. In a two loop system, the loop dedicated as non-system controller should be loop 2. Another work around is to use an ON TIMER interrupt to cause the interrupt to be detected.



Portable Computer Division
1000 N.E. Circle Blvd., Corvallis, OR 97330, U.S.A.

European Headquarters
150, Route du Nant-D'Avril
P.O. Box, CH-1217 Meyrin 2
Geneva-Switzerland

HP-United Kingdom
(Pinewood)
GB-Nine Mile Ride, Wokingham
Berkshire RG11 3LL