

## Initial Testing of VDIP 1 via H8 Front Panel

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On an H8 system you can use the Front Panel Monitor and keypad to test the VDIP-1 interface. The monitor and keypad can be used to directly read and write to specific hardware ports. The VDIP data port is 261 (octal) and the status port is 262 (octal).

When you power cycle or reset the system the VDIP will generate a standard power on report which normally looks like the following:

```
Ver 03.69VDAPF On-Line:
Device Detected P2
No Upgrade
D:\>
```

This assumes that there is a flash disk inserted (hence the “Device Detected P2” message). After a system reset this data is stored in the VDIP cache until it is read. Here is how to read it from the Front Panel:

1. Hardware reset the H8 or do a **[0/RST0]** key combination to reset.
2. Read from the data port as follows, using the front panel key in:

**[MEM] 0 0 0 2 6 1 [IN]**

3. You should see the following displayed in the left half of the display: **0 1 5**. This is the ASCII Carriage Return character (that is the first character output by the device, not visible in the listing shown above).
4. Continue to hit the **[IN]** key and you will get successive characters. You should see:

```
1 2 6
1 4 5
1 6 2
0 4 0
0 6 0
0 6 3
0 5 6
```

...

5. This is the ASCII equivalent of the power on report (i.e. “Ver 03.69VDAPF ...”).
6. Continue to hit the **[IN]** key until all of the data is read (about 60 bytes total). The last character is a Carriage Return – when you get there successive **[IN]** keypresses will simply continue to yield the last byte read, namely **0 1 5**.

7. If the above test succeeds you know that the VDIP-1 came alive and produced the appropriate power on message output on port 261. Now you need to see if it can respond to input.
8. Using the keypad enter:

**[MEM] 1 0 5 2 6 1 [OUT]**, followed by

**[MEM] 0 1 5 2 6 1 [OUT]**.

This outputs an "E" followed by a Carriage Return. The VDIP-1 should respond by echoing the "E" and Carriage Return.

9. To test for the appropriate response enter:

**[MEM] 0 0 0 2 6 1 [IN]**

and you should see **1 0 5** displayed in the left half of the display. Hit **[IN]** again and you should see **0 1 5** (Carriage Return).

This concludes the test. If you were able to get the appropriate behavior then your VDIP-1 interface should be working and you can proceed to using the utility programs.