



# Apple II IWM Port Description

<http://web.pdx.edu/~heiss>  
22 January 2006

Miscellaneous #6  
IWM Port Description

Revised by Glenn A. Baxter (November 1988)  
Written by Cameron Birse (February 1986)

This Technical Note documents the IWM port pin assignments on various machines.  
-----

## Apple IIGS Disk Port Pin Assignments

Signal Name	Disk Port Pins (DB-19)
Phase 0	11
Phase 1	12
Phase 2	13
Phase 3	14
/WReq	15
Dr1	17
Rd	18
Wr	19
Wrt Prot	10
Dr2	9
HeadSel	16
Gnd	1,2,3
3.5Disk	4
-12v	5
+5v	6
+12v	7,8

## Apple IIe UniDisk 3.5 Controller Disk Port Pin Assignments

Signal Name	Disk Port Pins (DB-19)
Phase 0	11
Phase 1	12
Phase 2	13
Phase 3	14
/WrtReqII	15

/HstEnbl  
17  
Rd  
18  
Wr  
19  
Wrt Prot  
10  
No Connection  
9,16  
Gnd  
1,2,3,4  
-12v  
5  
+5v  
6  
+12v  
7,8

#### Apple IIC Disk Port Pin Assignments

Signal Name  
Disk Port Pins (DB-19)  
Phase 0  
11  
Phase 1  
12  
Phase 2  
13  
Phase 3  
14  
/WrtReq  
15  
/Enbl 2  
17  
Rd  
18  
Wr  
19  
Wrt Prot  
10  
No Connection  
16  
Gnd  
1,2,3,4  
-12v  
5  
+5v  
6  
+12v  
7,8  
External Interrupt  
9

Note: On the Apple IIc Plus, the disk port pins are driven by a custom ASIC instead of by the IWM chip.

#### Macintosh Disk Port Pin Assignments

Signal Name  
Disk Port Pins (DB-19)  
Phase 0  
11  
Phase 1  
12  
Phase 2  
13  
Phase 3  
14  
/WrtReq  
15  
/Enbl 2  
17  
Rd  
18  
Wr  
19  
PWM  
10  
HdSel  
16  
GND  
1,2,3,4  
-12v  
5  
+5v  
6  
+12v  
7,8

-----  
Back to the:

- \* Table of Contents in Technical Note #0
- \* Index
- \* Technical Notes start page

This and all of the other Apple II Technical Notes have been converted to HTML by Aaron Heiss as a public service to the Apple II community, with permission by Apple Computer, Inc. Any and all trademarks, registered and otherwise, are properties of their owners.