

HDI-45 connector

The **HDI-45** was one of Apple Computer's proprietary cable-to-onboard video connectors. A 45-pin connector, the HDI stands for High-Density Interconnect.

Use

These connectors were used only in the first generation Power Macintosh computers (the Power Macintosh 6100, 7100 and 8100), specifically connecting these computers to the Apple AudioVision 14 Display, the only display to use this connector. Other Apple displays and third-party displays could be used with a special adapter for the receptacle on the computer ("Canneloni", Apple part M2681LL/A or 590-0796-A)^[1] or a breakout cable ("Calamari", Apple M1243LL/A or 590-0793-A) for the permanently attached cable to the monitor that converts this unusual port to a standard DA-15 connector.^{[2][3]}

Technical

In addition to carrying analog RGB video, the connector supports analog stereo audio signals (input and output), Apple Desktop Bus (ADB), and S-video input.^[4] Because the AudioVision 14 Display has front-mounted connectors for ADB and audio and video, a single consolidated cable and proprietary connector was used to simplify the connection to the computer and reduce cable clutter.^[1]

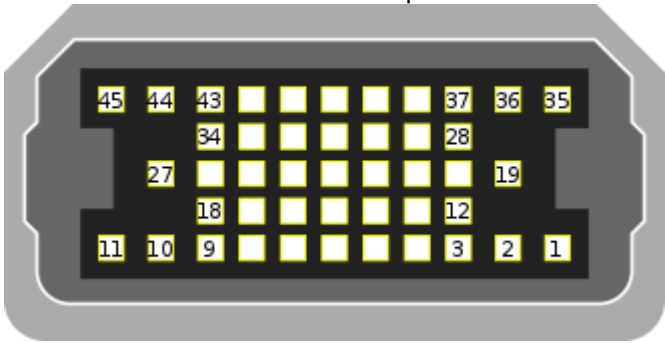


HDI-45 is the third onboard connector from the top along the left rear edge of this Power Macintosh 8100.

US Conec EX1023
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U.S. Patent No. 11,333,836

AudioVision HDI-45 pinout^[4]



Pin	Function
1	Analog audio ground
2	Audio input shield
3	Audio input (L)
4	Audio input (R)
5	Audio output (L)
6	Audio output (R)
7	Reserved
8	Monitor ID sense line 1
9	Monitor ID sense line 2
10	Video ground/shield (G)
11	Video output (G), 75Ω
12	Video input power ground
13	+5V for camera
14	Reserved
15	
16	
17	
18	Monitor ID sense line 3
19	S-video input shield
20	S-video input, luminance (Y)
21	S-video input, chroma (C)
22	Reserved
23	Not used
24	Reserved
25	
26	Video ground/shield (R)
27	Video output (R), 75Ω
28	I ² C data signal

29	I ² C clock signal
30	Reserved
31	Monitor ID
32	Monitor ID
33	Vertical sync
34	Composite sync
35	ADB power, +5V
36	ADB ground
37	ADB data
38	Keyboard switch
39	Reserved
40	
41	Monitor ID
42	Horizontal sync
43	Video sync ground
44	Video ground/shield (B)
45	Video output (B), 75Ω

See also

- VESA Enhanced Video Connector, a similar concept to consolidate multiple cables

References

1. Kan, Steven. "PowerMac 6100 Graphics Hardware" (<https://www.kan.org/6100/graphicshardware.html>). *kan.org*. Retrieved 1 February 2023.
2. "Artifact Details: Integrated Desktop Cable (IDC)" (<https://www.computerhistory.org/collections/catalog/102688806>). *Computer History Museum*. Retrieved 1 February 2023.
3. "AudioVision 14 Display: Q & A" (https://support.apple.com/kb/TA29765?locale=en_US). *Apple Support*. February 19, 2012. Retrieved 1 February 2023. "

Q: What is the Integrated Desktop Cable (IDC)?

A: It's a new high-density cable for plug-and-play set-up. The IDC replaces five cables that would normally have to run from your computer to your display to provide the same AudioVision functionality (sound-in, sound-out, ADB, video-in, video-out). Now with a single "snap" you'll be connected.

Q: When do I need the AudioVision Adapter?

A: It is required on all modular Macintosh models that do not have the high-density connector on the back panel of the computer. The part number is M1243LL/A. Future Apple CPU's will support the new integrated desktop cable and, therefore, will not require the AudioVision adapter."
4. "Power Macintosh Pinouts, Article ID 14703" (<https://web.archive.org/web/20000529033846/http://til.info.apple.com/techinfo.nsf/artnum/n14703>). *Tech Info Library*. Apple Computer. July 29, 1998. Archived from the original (<http://til.info.apple.com/techinfo.nsf/artnum/n14703>) on May 29, 2000.

External links

- ["HDI-45 Pinout" \(https://pinouts.ru/Video/audiovision_pinout.shtml\)](https://pinouts.ru/Video/audiovision_pinout.shtml)
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