



Maintenance and Service Guide

HP Notebook QuickDock

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This guide is a troubleshooting reference used for maintaining and servicing the HP Notebook QuickDock. It provides comprehensive information on identifying QuickDock features, components, and spare parts; troubleshooting problems; and performing disassembly procedures.

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Maintenance and Service Guide
HP Notebook QuickDock
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Product Description

The HP Notebook QuickDock provides an efficient, less-cluttered work environment and improved cable management.



HP Notebook QuickDock and HP Expansion Accessory Adapter

The HP Notebook QuickDock is compatible with the following platforms:

- HP Pavilion dv9000 Notebook PC
- HP Pavilion dv6000 Notebook PC
- HP Pavilion dv2000 Notebook PC
- HP Pavilion tx1000 Entertainment PC
- Compaq Presario V6000 Notebook PC
- Compaq Presario V3000 Notebook PC

The following computers require use of the HP Expansion Accessory Adapter to connect to the QuickDock:

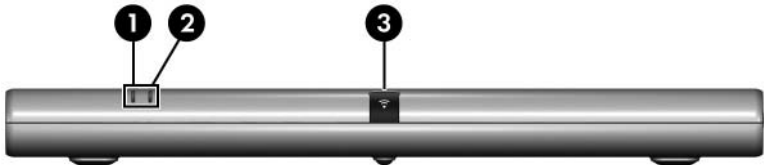
- HP Pavilion dv8300 Notebook PC
- HP Pavilion dv8000 Notebook PC
- HP Pavilion dv5000 Notebook PC
- HP Pavilion dv4000 Notebook PC
- HP Pavilion dv1400 Entertainment Notebook PC
- HP Pavilion ze2000 Notebook PC
- HP Compaq nx4820 Notebook PC
- HP Special Edition L2000 Notebook PC
- Compaq Presario V5000 Notebook PC
- Compaq Presario V4000 Notebook PC
- Compaq Presario V2000 Notebook PC
- Compaq Presario M2000 Notebook PC

1.1 Features

- External AC adapter (charges docked computer)
- Security slot
- Lights (power connection and docking connection)
- Connectors:
 - Expansion cable
 - Audio-out (headphone) connector
 - Audio-in (microphone) connector
 - Universal Serial Bus (USB) 2.0 connectors (6)
 - Power connector
 - Component video jacks
 - S-Video-out
 - Composite video jack
 - S/PDIF (Sony/Philips Digital Interface) audio connector
 - External monitor port
 - RJ-45/Ethernet port

1.2 External Components

The external components on the front panel of the QuickDock are shown below and described in Table 1-1.

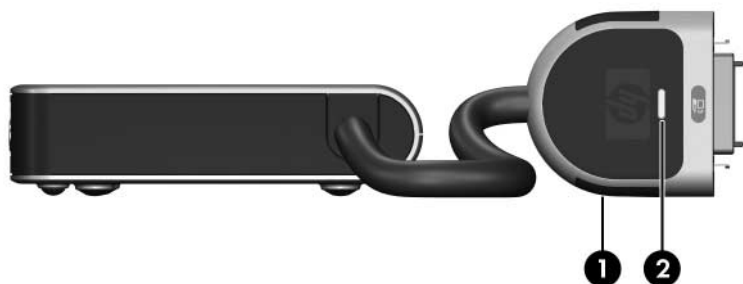


Front Components

Table 1-1
Front Components

Item	Component	Function
1	Connection indicator light	On: The computer is connected and turned on.
2	AC power connect light	On. The QuickDock is connected to AC power.
3	Consumer infrared lens	Detects the infrared signal of an optional remote control.

The external components on the left side of the QuickDock are shown below and described in Table 1-2.



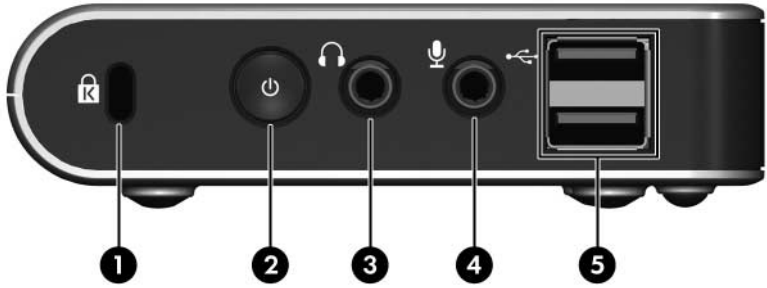
Left-Side Components

Table 1-2

Left-Side Components




Item	Component	Function
1	Expansion cable	Connects the QuickDock to a computer.
2	Connection indicator light	On: The computer is connected and turned on.

The external components on the right side of the QuickDock are shown below and described in Table 1-3.



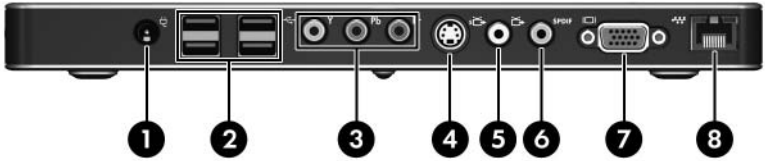
Right-Side Components

Table 1-3
Right-Side Components

Item	Component	Function
1	Security cable slot	<p>Attaches an optional security cable to the QuickDock.</p> <p> The security cable is designed to act as a deterrent, but it may not prevent the computer from being mishandled or stolen.</p>
2	Power button	<p>Turns on the computer.</p> <p> The power button on the QuickDock has the same function as the power button on the computer, even if the computer display is closed.</p>
3	Audio-out (headphone) jack	<p>Produces QuickDock sound when connected to optional powered stereo speakers, headphones, ear buds, a headset, or television audio.</p> <p> Speakers connected to the QuickDock are muted when a device is connected to the headphone jack.</p>
4	Audio-in (microphone) jack	Connects an optional computer headset microphone, stereo array microphone, or monaural microphone.
5	USB ports (2)*	Connect optional USB devices.

*There are 4 additional USB ports on the rear of the QuickDock.

The external components on the rear panel of the QuickDock are shown below and described in Table 1-4.



Rear Panel Components

Table 1-4
Rear Components

Item	Component	Function
1	Power connector	Connects the computer's AC adapter or an optional adapter.
2	USB ports (4)*	Connect optional USB devices.
3	Component video jacks (3)	Connect an optional component video device.
4	S-Video-out jack	Connects an optional S-Video device such as a television, VCR, camcorder, overhead projector, or video capture card.
5	Composite video jack	Connects an optional composite video device.
6	S/PDIF (Sony/Philips Digital Interface) digital audio jack	Connects an optional compatible audio/video receiver through a digital coaxial cable (purchased separately).
7	External monitor port	Connects an optional external VGA monitor or projector.
8	RJ-45 (network) jack	Connects a network cable.

*There are 2 additional USB ports on the right side of the QuickDock.

1.3 Design Overview

This section presents a design overview of key parts and features of the QuickDock. Refer to [Chapter 3, “Illustrated Parts Catalog,”](#) to identify replacement parts.

The QuickDock provides the following device connections:

- Expansion cable
- S/PDIF (Sony/Philips Digital Interface) audio connector
- Audio-out (headphone) jack
- Composite out
- RJ-11 (modem) connection (from telephone to QuickDock)
- RJ-11 (modem) connection (from QuickDock to computer)
- RJ-45 (network) port
- USB 2.0 connectors (3)
- S-Video-out
- Serial port



CAUTION: To properly ventilate the QuickDock, allow at least a 7.6-cm (3-inch) clearance on the left and right sides of the unit.

The computer uses an electric fan for ventilation. The fan is controlled by a temperature sensor and is designed to turn on automatically when high temperature conditions exist. These conditions are affected by high external temperatures, system power consumption, power management/battery conservation configurations, battery fast charging, and software.

Connecting to AC Power



WARNING: To reduce the risk of electric shock or damage to your equipment:

- Plug the power cord into an electrical outlet that is easily accessible at all times.
 - Disconnect power from the product by unplugging the power cord from the electrical outlet.
 - If provided with a 3-pin attachment plug on your power cord, plug the cord into a grounded (earthed) 3-pin outlet. Do not disable the power cord grounding pin, for example, by using a 2-pin adapter. The grounding pin is an important safety feature.
-

To ensure the correct performance of all QuickDock features, connect the QuickDock to an AC power source using the computer AC adapter and power cord.

1. Connect the computer AC adapter to the power connector on the QuickDock ❶.
2. Connect the AC power cord to the AC adapter ❷.
3. Connect the AC power cord to the AC outlet ❸.



Connecting the QuickDock to AC Power



Power cords and power outlets vary by region and country.

The AC adapter is included with the computer or is purchased separately.

Connecting the Computer

This section applies to the following computers:

- HP Pavilion dv9000 Notebook PC
- HP Pavilion dv6000 Notebook PC
- HP Pavilion dv2000 Notebook PC
- HP Pavilion tx1000 Entertainment PC
- Compaq Presario V6000 Notebook PC
- Compaq Presario V3000 Notebook PC

Refer to [Section 1.4, “Using the HP Expansion Accessory Adapter,”](#) if you are connecting a computer that requires the HP Expansion Accessory Adapter.

To connect the computer to the QuickDock:

1. Press the buttons on the sides of the expansion cable ❶.
2. Connect the expansion cable to the computer ❷, matching the icon on the computer expansion port with the icon on the end of the expansion cable.

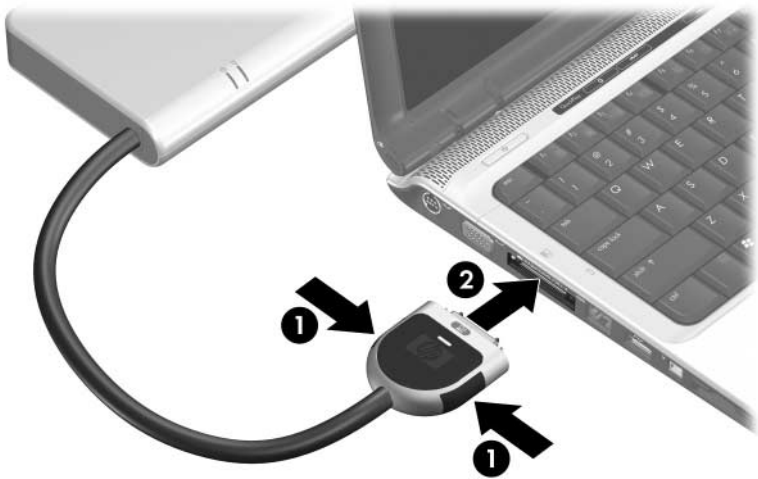


CAUTION: To prevent damage to the expansion port, be sure that you correctly align the expansion cable to the expansion port on the computer.



The location of the expansion port on your computer varies by computer series and model.

The expansion port may also be called “expansion port 3” in the computer user guide.



Connecting the Expansion Cable to the Computer

If the computer is on, the connection indicator light on the expansion cable turns on.



Identifying the Connection Indicator Light

3. If the computer is not already turned on:
 - ❑ Press the power button on the computer.



Pressing the Computer Power Button



The power button location on the computer varies by computer series and model.

– or –

- ❑ Press the power button on the QuickDock.



Pressing the QuickDock Power Button



The power button on the QuickDock allows you to turn the computer on or off when the computer is closed.

The power light on the front of the QuickDock turns on.



Identifying the QuickDock Power Light

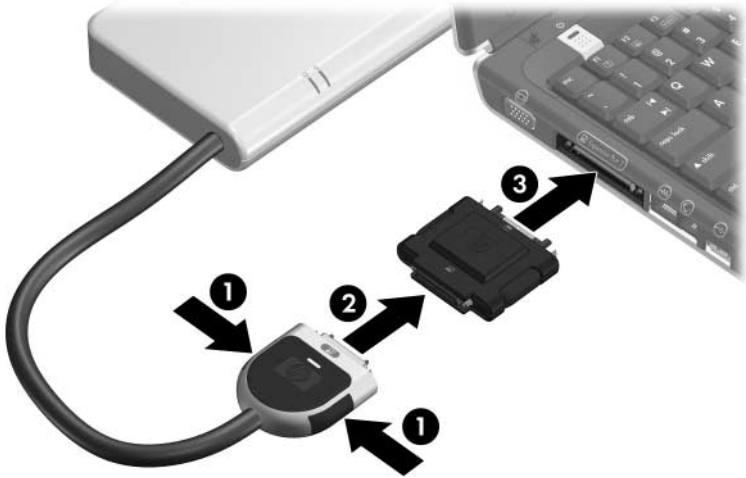
1.4 Using the HP Expansion Accessory Adapter

The following computers require use of the HP Expansion Accessory Adapter to connect the computer to the QuickDock:

- HP Pavilion dv8300 Notebook PC
- HP Pavilion dv8000 Notebook PC
- HP Pavilion dv5000 Notebook PC
- HP Pavilion dv4000 Notebook PC
- HP Pavilion dv1400 Entertainment Notebook PC
- HP Pavilion ze2000 Notebook PC
- HP Compaq nx4820 Notebook PC
- HP Special Edition L2000 Notebook PC
- Compaq Presario V5000 Notebook PC
- Compaq Presario V4000 Notebook PC
- Compaq Presario V2000 Notebook PC
- Compaq Presario M2000 Notebook PC

To connect a computer using the HP Expansion Accessory Adapter:

1. Press the buttons on the sides of the expansion cable **1**.
2. Connect the expansion cable to the expansion accessory adapter **2**, matching the icon on the expansion cable with the icon on the end of the expansion accessory adapter.
3. Connect the expansion accessory adapter to the computer **3**.



Connecting the HP Expansion Accessory Adapter

Troubleshooting



WARNING: Only authorized technicians trained by HP should repair this equipment. All troubleshooting and repair procedures are detailed to allow only subassembly-/module-level repair. Because of the complexity of the individual boards and subassemblies, do not attempt to make repairs at the component level or modifications to any printed wiring board. Improper repairs can create a safety hazard. Any indication of component replacement or printed wiring board modification may void any warranty or exchange allowances.

This chapter contains troubleshooting information for the QuickDock. Carefully match the symptoms of the malfunction against the problem description in the troubleshooting tables to avoid a misdiagnosis. Refer to Chapter 5 for all removal and replacement procedures.

Follow these guidelines when troubleshooting:

- Complete the recommended actions in the order in which they are given.
- When the problem is resolved, do not complete the remaining troubleshooting steps.

When troubleshooting a problem, check the following list for possible solutions before requesting replacement:

- Be sure that cables are connected properly to the suspected defective part.
- Be sure that all required device drivers are installed on the computer.

Problems and Solutions

The following tables list possible problems, the possible cause of each problem, and the recommended solution.

Table 2-1
General Use and Connection
Problems and Solutions

Problem	Possible Cause	Solution
The connection indicator light is off.	The computer is not on.	Turn on the computer.
	The QuickDock is not connected to AC power.	Connect the AC adapter to the QuickDock and to an AC outlet.
	The expansion cable on the QuickDock is not fully connected to the expansion port on the computer.	Disconnect the expansion cable from the computer, and then reconnect the cable to the computer.
	The computer is in standby or hibernation.	Exit standby or hibernation.

Table 2-1
General Use and Connection
Problems and Solutions (*Continued*)

Problem	Possible Cause	Solution
The computer shuts down unexpectedly.	The QuickDock is not connected to AC power, draining the computer battery.	Connect the AC adapter to the QuickDock and to an AC outlet.
The ports or jacks on the QuickDock are not working.	The QuickDock is not connected to AC power.	Connect the AC adapter to the QuickDock and to an AC outlet.
	The computer is not connected to the QuickDock correctly.	Disconnect the expansion cable from the computer, and then reconnect the cable to the computer.

Table 2-2
Audio Problems and Solutions

Problem	Possible Cause	Solution
Headphones or other audio device connected to the QuickDock does not produce sound.	Headphones or another audio device is connected to the headphone jack on the computer. Using the headphone jack on the computer mutes sound through the QuickDock.	Disconnect the headphones or other audio device from the headphone jack on the computer.
	More than one audio device is connected to the QuickDock.	Be sure that only one audio device is connected to the QuickDock.
A microphone connected to the computer does not work.	A microphone is connected to the QuickDock. While a microphone is connected to the QuickDock, the microphone jack on the computer is disabled.	Either use the microphone connected to the QuickDock or disconnect it.
A connected home entertainment system does not have audio.	Audio is not connected properly.	Be sure that the QuickDock is properly connected to the home entertainment system.
A connected home entertainment system does not experience surround sound.	The home entertainment system may not support digital audio.	Be sure that your home entertainment system is S/PDIF compatible. Refer to the user guide for your home entertainment device.

Table 2-3
Video Problems and Solutions

Problem	Possible Cause	Solution
A connected home entertainment system does not have video.	The video cable is not connected correctly.	Disconnect and reconnect the video cable.
	The screen image is displaying on the computer.	Press fn+f4 on the computer to switch the image from the computer to the external display.
	The QuickDock is not connected to AC power.	Connect the AC adapter to the QuickDock and to an AC outlet.
	The computer is not connected to the QuickDock correctly.	Disconnect the expansion cable from the computer, and then reconnect the cable to the computer.
A video device connected to the external monitor port on the computer does not work.	When the computer is connected to the QuickDock, the external monitor port on the computer is disabled.	Use the external monitor port on the QuickDock.

Getting More Information

- For comprehensive information about your computer, as well as governmental agency and safety information about the use of your computer, access the Help and Support Center by selecting **Start > Help and Support**.
- The HP Web site (<http://www.hp.com>) provides product news and software updates.

Customer Care

If you cannot solve a problem using the troubleshooting tips in this chapter, you may need to contact Customer Care.

For the fastest possible resolution of your problem, have the following information available when you call or e-mail:

- The computer and QuickDock model types
- Serial numbers for the computer and QuickDock
- Dates the computer and QuickDock were purchased
- Conditions under which the problem occurred
- Error messages that have been displayed
- Hardware configuration of the computer
- Hardware and software you are using
- The manufacturer and model of the printer or other accessories connected to the computer and QuickDock
- Configuration settings, including contents of the system files

To access Customer Care, visit the HP Web site at <http://www.hp.com/support>.

Illustrated Parts Catalog

This chapter provides an illustrated parts breakdown and a reference for spare part numbers and option part numbers.

3.1 Serial Number Location

When ordering parts or requesting information, provide the QuickDock serial number and model number located on the bottom of the base plate.



Serial Number Location

3.2 QuickDock Components



HP Notebook QuickDock Components

Table 3-1

Spare Parts: QuickDock Components

Item	Description	Spare Part Number
1	HP Notebook QuickDock	430326-001
2	HP Expansion Accessory Adapter	430327-001

Replacement Preliminaries

This chapter provides essential information for proper and safe replacement service.

4.1 Tools Required

You will not need any tools to complete the replacement procedures.

4.2 Service Considerations

The following sections include some of the considerations that you should keep in mind during replacement procedures.

4.3 Preventing Damage to Removable Drives

Removable drives are fragile components that must be handled with care. To prevent damage to the QuickDock, damage to a removable drive, or loss of information, observe the following precautions:

- Before removing or inserting a hard drive, shut down the system (computer and QuickDock). If you are unsure whether the system is off or in hibernation, turn the system on, and then shut it down through the operating system.
- Before removing a diskette drive or optical drive, ensure that a diskette or disc is not in the drive and ensure that the optical drive tray is closed.
- Before handling a drive, ensure that you are discharged of static electricity. While handling a drive, avoid touching the connector.
- Handle drives on surfaces covered with at least one inch of shock-proof foam.
- Avoid dropping drives from any height onto any surface.
- After removing a hard drive or MultiBay II device, place it in a static-proof bag.
- Avoid exposing a hard drive to products that have magnetic fields, such as monitors or speakers.
- Avoid exposing a drive to temperature extremes or liquids.
- If a drive must be mailed, place the drive in a bubble pack mailer or other suitable form of protective packaging and label the package, "FRAGILE: Handle With Care."

4.4 Preventing Electrostatic Damage

Many electronic components are sensitive to electrostatic discharge (ESD). Circuitry design and structure determine the degree of sensitivity. Networks built into many integrated circuits provide some protection, but in many cases, the discharge contains enough power to alter device parameters or melt silicon junctions.

A sudden discharge of static electricity from a finger or other conductor can destroy static-sensitive devices or microcircuitry. Often the spark is neither felt nor heard, but damage occurs.

An electronic device exposed to electrostatic discharge might not be affected at all and can work perfectly throughout a normal cycle. Or the device might function normally for a while, then degrade in the internal layers, reducing its life expectancy.

4.5 Packaging and Transporting Precautions

Use the following grounding precautions when packaging and transporting equipment:

- To avoid hand contact, transport products in static-safe containers, such as tubes, bags, or boxes.
- Protect all electrostatic-sensitive parts and assemblies with conductive or approved containers or packaging.
- Keep electrostatic-sensitive parts in their containers until the parts arrive at static-free workstations.
- Place items on a grounded surface before removing items from their containers.
- Always be properly grounded when touching a sensitive component or assembly.
- Store reusable electrostatic-sensitive parts from assemblies in protective packaging or nonconductive foam.
- Use transporters and conveyors made of antistatic belts and roller bushings. Ensure that mechanized equipment used for moving materials is wired to ground and that proper materials are selected to avoid static charging. When grounding is not possible, use an ionizer to dissipate electric charges.

4.6 Workstation Precautions

Use the following grounding precautions at workstations:

- Cover the workstation with approved static-shielding material (refer to [Table 4-2, “Static-Shielding Materials”](#)).
- Use a wrist strap connected to a properly grounded work surface and use properly grounded tools and equipment.
- Use conductive field service tools, such as cutters, screwdrivers, and vacuums.
- When using fixtures that must directly contact dissipative surfaces, only use fixtures made of static-safe materials.
- Keep the work area free of nonconductive materials, such as ordinary plastic assembly aids and Styrofoam.
- Handle electrostatic-sensitive components, parts, and assemblies by the case or PCM laminate. Handle these items only at static-free workstations.
- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting or removing connectors or test equipment.

4.7 Grounding Equipment and Methods

Grounding equipment must include either a wrist strap or a foot strap at a grounded workstation.

- When seated, wear a wrist strap connected to a grounded system. Wrist straps are flexible straps with a minimum of one megohm $\pm 10\%$ resistance in the ground cords. To provide proper ground, wear a strap snugly against the skin at all times. On grounded mats with banana-plug connectors, use alligator clips to connect a wrist strap.
- When standing, use foot straps and a grounded floor mat. Foot straps (heel, toe, or boot straps) can be used at standing workstations and are compatible with most types of shoes or boots. On conductive floors or dissipative floor mats, use foot straps on both feet with a minimum of one megohm resistance between the operator and ground. To be effective, the conductive strips must be worn in contact with the skin.

Other grounding equipment recommended for use in preventing electrostatic damage includes:

- Antistatic tape
- Antistatic smocks, aprons, and sleeve protectors
- Conductive bins and other assembly or soldering aids
- Nonconductive foam
- Conductive tabletop workstations with ground cords of one megohm resistance
- Static-dissipative tables or floor mats with hard ties to the ground
- Field service kits
- Static awareness labels
- Material-handling packages
- Nonconductive plastic bags, tubes, or boxes
- Metal tote boxes
- Electrostatic voltage levels and protective materials

Table 4-1 shows how humidity affects the electrostatic voltage levels generated by different activities.

Table 4-1
Typical Electrostatic Voltage Levels

Event	Relative Humidity		
	10%	40%	55%
Walking across carpet	35,000 V	15,000 V	7,500 V
Walking across vinyl floor	12,000 V	5,000 V	3,000 V
Motions of bench worker	6,000 V	800 V	400 V
Removing DIPS from plastic tube	2,000 V	700 V	400 V
Removing DIPS from vinyl tray	11,500 V	4,000 V	2,000 V
Removing DIPS from Styrofoam	14,500 V	5,000 V	3,500 V
Removing bubble pack from PCB	26,500 V	20,000 V	7,000 V
Packing PCBs in foam-lined box	21,000 V	11,000 V	5,000 V


 A product can be degraded by as little as 700 V.

Table 4-2 lists the shielding protection provided by antistatic bags and floor mats.


Table 4-2
Static-Shielding Materials

Material	Use	Voltage Protection Level
Antistatic plastic	Bags	1,500 V
Carbon-loaded plastic	Floor mats	7,500 V
Metallized laminate	Floor mats	5,000 V

Specifications

This chapter provides physical and performance specifications.

Table 6-1
HP Notebook QuickDock

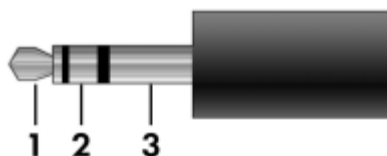
Dimensions		
Length	26.6 cm	10.74 in
Width	10.0 cm	3.94 in
Height	2.3 cm	0.91 in
Weight		
	0.97 kg	2.14 lbs
Temperature		
Operating*	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
 Applicable product safety standards specify thermal limits for plastic surfaces. The QuickDock operates well within this range of temperatures.		
Relative humidity (noncondensing)		
Operating	10% to 90%	
Nonoperating	5% to 95%, 38.7°C (101.6°F) maximum wet bulb temperature	

A

Connector Pin Assignments

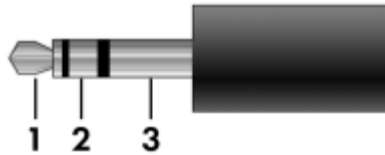
Table A-1

Audio-In (Microphone) Jack



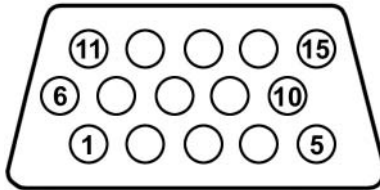
Pin	Signal	Pin	Signal
1	Audio signal in	3	Ground
2	Audio signal in		

Table A-2
Audio-Out (Headphone) Jack



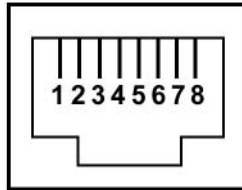
Pin	Signal	Pin	Signal
1	Audio out, left channel	3	Ground
2	Audio out, right channel		

Table A-3
External Monitor Port



Pin	Signal	Pin	Signal
1	Red analog	9	+5 VDC
2	Green analog	10	Ground
3	Blue analog	11	Monitor detect
4	Not connected	12	DDC 2B data
5	Ground	13	Horizontal sync
6	Ground analog	14	Vertical sync
7	Ground analog	15	DDC 2B clock
8	Ground analog		

Table A-4
RJ-45 (Network) Jack



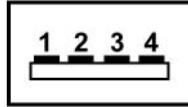
Pin	Signal	Pin	Signal
1	Transmit +	5	Unused
2	Transmit –	6	Receive –
3	Receive +	7	Unused
4	Unused	8	Unused

Table A-5
S-Video-Out Jack



Pin	Signal	Pin	Signal
1	TV-Ground	5	TV-CD
2	TV-CVBS	6	TV-Ground
3	TV-Ground	7	TV-YD
4	TV-Ground		

Table A-6
Universal Serial Bus



Pin	Signal	Pin	Signal
1	+5 VDC	3	Data +
2	Data -	4	Ground

Power Cord Set Requirements

3-Conductor Power Cord Set

The wide range input feature of the QuickDock permits it to operate from any line voltage from 100 to 120 or 220 to 240 volts AC.

The power cord set included with the QuickDock meets the requirements for use in the country where the equipment is purchased.

Power cord sets for use in other countries must meet the requirements of the country where the QuickDock is used.

General Requirements

The requirements listed below are applicable to all countries.

- The length of the power cord set must be at least 1.5 m (5.0 ft) and a maximum of 2.0 m (6.5 ft).
- All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord set will be used.
- The power cord sets must have a minimum current capacity of 10 amps and a nominal voltage rating of 125 or 250 V AC, as required by each country's power system.
- The appliance coupler must meet the mechanical configuration of an EN 60 320/IEC 320 Standard Sheet C13 connector for mating with the appliance inlet on the back of the QuickDock.

Country-Specific Requirements

3-Conductor Power Cord Set Requirements

Country/Region	Accredited Agency	Applicable Note Number
Australia	EANSW	1
Austria	OVE	1
Belgium	CEBC	1
Canada	CSA	2
Denmark	DEMKO	1
Finland	FIMKO	1
France	UTE	1
Germany	VDE	1
Italy	IMQ	1
Japan	METI	3



NOTES:

1. The flexible cord must be <HAR> Type HO5VV-F, 3-conductor, 1.0 mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.
2. The flexible cord must be Type SPT-3 or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15 A, 125 V) or NEMA 6-15P (15 A, 250 V) configuration.
3. The appliance coupler, flexible cord, and wall plug must bear a "T" mark and registration number in accordance with the Japanese Dentori Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 1.00 mm² conductor size. The wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7 A, 125 V) configuration.

3-Conductor Power Cord Set Requirements (*Continued*)

Country/Region	Accredited Agency	Applicable Note Number
Korea	EK	4
The Netherlands	KEMA	1
Norway	NEMKO	1
People's Republic of China	CCC	5
Sweden	SEMKO	1
Switzerland	SEV	1
Taiwan	BSMI	4
United Kingdom	BSI	1
United States	UL	2



NOTES:

1. The flexible cord must be <HAR> Type HO5VV-F, 3-conductor, 1.0 mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.
2. The flexible cord must be Type SPT-3 or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15 A, 125 V) or NEMA 6-15P (15 A, 250 V) configuration.
3. The appliance coupler, flexible cord, and wall plug must bear a “T” mark and registration number in accordance with the Japanese Dentori Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 1.00 mm² conductor size. The wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7 A, 125 V) configuration.
4. The flexible cord must be Type RVV, 3-conductor, 0.75 mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.
5. The flexible cord must be Type VCTF, 3-conductor, 0.75 mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.

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