Dell™ E157FPT Touch Screen Monitor Contents

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Notes, Notices, and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your computer.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

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About Your Monitor

Dell™ E157FPT Touch Screen Monitor Contents

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Front View
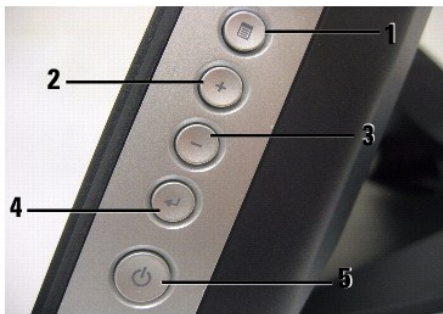
1. **Menu button** - Enters/exits the OSD menu.

2. **Adjust up / Contrast button** - Adjusts screen contrast, increases value of the selected OSD item, and moves the OSD selection cursor in the clockwise direction.

3. **Adjust down /Volume button** - Adjusts volume, decreases value of the selected OSD item, and moves the OSD selection cursor in the counter-clockwise direction.

4. **Select button**- Enters an OSD item for adjustment.

5. **Power button**- Enables/disables monitor power.

Back View
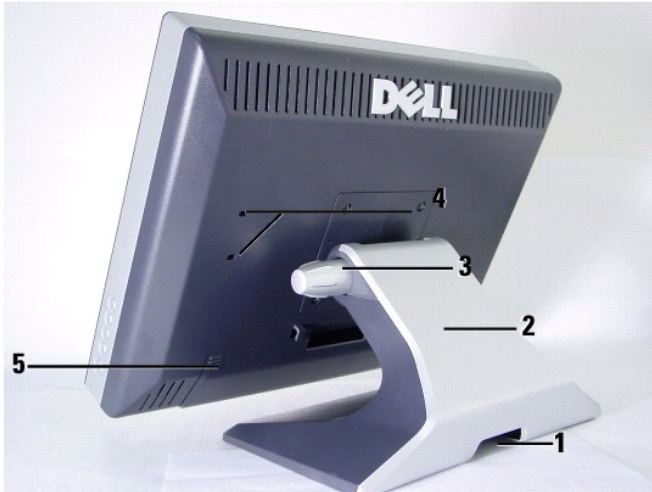
1. Cable holder

2. Monitor stand

3. Tilt-adjust knob

4. Mounting holes for optional Magnetic Stripe Reader (MSR) device

5. Cable cover

6. Optional MSR device

7. USB cable holder
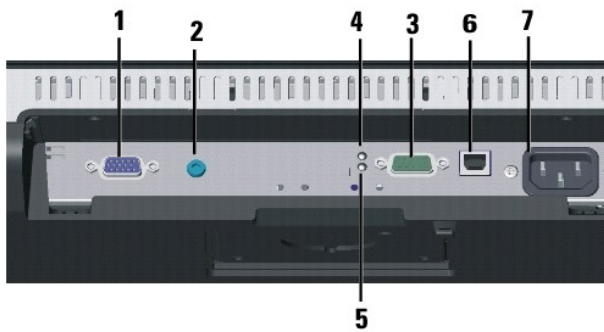
1. Video connector

2. Audio connector

3. Power status LED indicator

4. Touch status LED indicator

5. Serial connector

6. USB connector

7. AC power

Side View

To adjust monitor angle:

1. Loosen tilt-adjust knob.

2. Position monitor as desired (range is from 30° to 90°).

3. Tighten tilt-adjust knob. Do not over tighten.

Bottom view
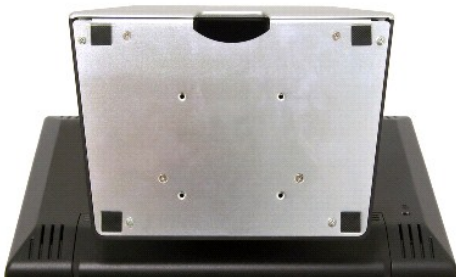
Specifications

The following tables provide information about your touch screen monitor.

General

Model number	E157FPT

Flat Panel

The following table shows physical and optical properties of the monitor's display panel.

Screen type	Active matrix - TFT LCD
Screen dimensions	Diagonal 15 inches (381 mm)
	Horizontal 11.9 inches (304 mm)
	Vertical 8.9 inches (228 mm)
Pixel pitch	0.297x0.297mm
Viewing angle	125° (vertical) typical, 140° (horizontal) typical
Luminance output	230 cd/m2 typical
Contrast ratio	500 : 1 typical
LCD surface coating	Hardness 3H, antiglare treatment

Resolution

The following table shows the scan rate and pixel resolution capabilities of the monitor's display.

Horizontal scan range	30 kHz to 61 kHz (automatic)
Vertical scan range	56 Hz to 76 Hz (automatic)
Optimal preset resolution	1024 x 768 at 60 Hz
Highest preset resolution	1024 x 768 at 75 Hz

Preset Display Modes

Dell guarantees image size and centering for all preset modes listed in the following table.

| Display mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal / Vertical)
DOS 720 x 400	31.5	70.1	28.3	-/+
VGA 640 x 480	31.5	60.0	25.18	-/-
VESA 640 x 480	37.5	75.0	31.5	-/-
VESA 800 x 600	37.9	60.3	40.0	+/+
VESA 800 x 600	46.9	75.0	49.5	+/+
VESA 1024 x 768	48.4	60.0	65.0	-/-
VESA 1024 x 768	60.0	75.5	78.8	+/+

Electrical

The following table shows electrical input requirements of the monitor.

Video input signals	Analog RGB, 0.700 volts, 75 ohm impedance
Synchronization input signals	Separate horizontal and vertical; 3.3V CMOS or 5V TTL level, positive or negative sync.
AC input voltage / frequency / current	100~240 VAC , 50 /60 Hz, 0.6A (RMS) max
Inrush current at 110 V	30 A max
Inrush current at 220 V	60 A max

Physical Characteristics

The following table shows the physical attributes of the monitor.

Dimensions: (with stand)	
Height	11.10 inches (282 mm)
Width	13.98 inches (355 mm)
Depth	8.90 inches (226 mm)
Dimensons (without stand)	
Height	11.10 inches (282 mm)
Width	13.98 inches (355 mm)
Depth	2.40 inches (61 mm)
Stand dimensions:	
Height	5.47 inches (139 mm)
Width	9.76 inches (248 mm)
Depth	3.58 inches (91 mm)
Weight with packaging	18.04 lb (8.2 kg) max
Weight with stand assembly and video cable	14.08 lb (6.4 kg) max
Weight without stand assembly (For wall mount or VESA mount considerations)	10.56 lb (4.8 kg) max
Weight of stand assembly	3.52 lb (1.6 kg) max

Environmental

The following table shows tolerable ambient environments while on (operating) and while off (non-operating).

Temperature:	
Operating	32° to 104°F (0° to 40 °C)
Nonoperating	-4° to 140°F (-20° to 60°C)
Humidity:	
Operating	10% to 80% (noncondensing)
Nonoperating	5% to 90% (noncondensing)
Altitude	
Operating	3,658 m (12,000 ft)
Nonoperating	12,192 m (40,000 ft)
Thermal dissipation	89 BTU/hour (maximum) 75 BTU/hour (typical)

Power Management Modes

During normal operation, the monitor's LED light is **green**. The LED indicates altered LED colors when monitor operates in different modes.

Power	Mode	Consumption Indicator
On	32w maximum, 26w typical	Green
Power Save	less than 2w	Amber
Switch Off	less than 1w	Off

We recommend switching the monitor off when it is not in use for a long period of time.

This display is ENERGY STAR-compliant.	

Zero power consumption in OFF mode can only be achieved by disconnecting the mains cable from the display.

ENERGY STAR is a U.S. registered mark. As an ENERGY STAR Partner, DELL has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

Pin Assignments - 15-pin D-sub connector
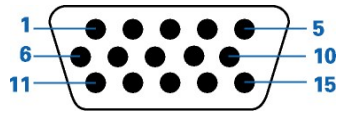
Pin Number	15-Pin Side of the Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	GND
6	GND-R
7	GND-G
8	GND-B
9	PC5V
10	GND
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock

Plug and Play Capability

You can install the display in any Plug and Play-compatible system. The display automatically provides the computer system with its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so the system can configure itself and optimize the display settings. If desired, you can select different settings, but in most cases display installation is automatic.

Caring for Your Monitor

⚠ **CAUTION:** Read and follow the safety instructions before cleaning the monitor.

⚠ **CAUTION:** Before cleaning the monitor, unplug the monitor from the electrical outlet.

The following tips will help keep your touchmonitor functioning at the optimal level.

- To avoid risk of electric shock, do not disassemble the monitor. The unit is not user-serviceable.
- Unplug the monitor from the power outlet before cleaning.
- For cleaning, do not use alcohol (methyl, ethyl or isopropyl) or any strong solvent. Do not use thinner or benzene, abrasive cleaners, or compressed air.
- To clean the display unit cabinet, use a cloth dampened with a mild detergent.
- Avoid getting liquids inside your touchmonitor. If liquid does get inside, have a qualified service technician check it before you power it on again.
- To clean the touch screen, use window or glass cleaner. Apply cleaner to a rag and wipe the touch screen. Never apply the cleaner directly to the touch screen.

Appendix

Dell™ E157FPT Touch Screen Monitor Contents

- Warranty Information
- CAUTION:General Safety Instructions
- CAUTION: Monitor Safety Instructions
- Contacting Dell
- Regulatory Notices
- Your Monitor Setup Guide

Warranty Information

U.S. Terms and Conditions of Sale

PLEASE READ THIS DOCUMENT CAREFULLY! IT CONTAINS VERY IMPORTANT INFORMATION ABOUT YOUR RIGHTS AND OBLIGATIONS, AS WELL AS LIMITATIONS AND EXCLUSIONS THAT MAY APPLY TO YOU. THIS DOCUMENT CONTAINS A DISPUTE RESOLUTION CLAUSE.

These terms and conditions ("Agreement") apply to your purchase of computer systems and/or related products and/or services and support sold in the United States ("Product") by the Dell entity named on the invoice or acknowledgement ("Dell") provided to you. By accepting delivery of the Product, you accept and are bound to the terms and conditions of this Agreement. If you do not wish to be bound by this Agreement, you must notify Dell immediately and return your purchase pursuant to Dell's Return Policy. (See: http://support.dell.com/ContactUs/ByPhone.aspx?c=us&l=en&s=gen for our contact information.) If returned, Product(s) must remain in the boxes in which they were shipped. THIS AGREEMENT SHALL APPLY UNLESS (I) YOU HAVE A SEPARATE PURCHASE AGREEMENT WITH DELL, IN WHICH CASE THE SEPARATE AGREEMENT SHALL GOVERN; OR (II) OTHER DELL TERMS AND CONDITIONS APPLY TO THE TRANSACTION.

1. **Other Documents.** This Agreement may NOT be altered, supplemented, or amended by the use of any other document(s) unless otherwise agreed to in a written agreement signed by both you and Dell. If you do not receive an invoice or acknowledgement in the mail, via e-mail, or with your Product, information about your purchase may be obtained at https://support.dell.com/dellcare/Invoice.aspx or by contacting your sales representative.

2. **Payment Terms; Orders; Quotes; Interest.** Terms of payment are within Dell's sole discretion, and unless otherwise agreed to by Dell, payment must be received by Dell prior to Dell's acceptance of an order. Payment for the products will be made by credit card, wire transfer, or some other prearranged payment method unless credit terms have been agreed to by Dell. Invoices are due and payable within the time period noted on the reverse side of this invoice, measured from the date of the invoice. Payment terms are within Dell's sole discretion, and, unless otherwise agreed to by Dell, payment must be made at the time of purchase. Payment for Product may be made by credit card, wire transfer, or some other prearranged payment method. Dell may invoice parts of an order separately. Your order is subject to cancellation by Dell, at Dell's sole discretion. Unless you and Dell have agreed to a different discount, Dell's standard pricing policy for Dell™-branded systems, which include both hardware and services in one discounted price, allocates the discount off list price applicable to the service portion of the system to be equal to the overall calculated percentage discount off list price on the entire system. Dell is not responsible for pricing, typographical, or other errors, in any offer by Dell and reserves the right to cancel any orders resulting from such errors.

3. **Shipping Charges; Taxes; Title; Risk of Loss.** Shipping and handling are additional unless otherwise expressly indicated at the time of sale. Title to products passes from Dell to Customer on shipment from Dell's facility. Loss or damage that occurs during shipping by a carrier selected by Dell is Dell's responsibility. Loss or damage that occurs during shipping by a carrier selected by you is your responsibility. You must notify Dell within 21 days of the date of your invoice or acknowledgement if you believe any part of your purchase is missing, wrong or damaged. Unless you provide Dell with a valid and correct tax exemption certificate applicable to your purchase of Product and the Product ship-to location, you are responsible for sales and other taxes associated with the order. Shipping dates are estimates only. Title to software will remain with the applicable licensor(s).

4. **Warranties.** THE LIMITED WARRANTIES APPLICABLE TO DELL-BRANDED HARDWARE PRODUCT CAN BE FOUND AT **http://www.dell.com/policy/legal/warranty.htm** OR IN THE DOCUMENTATION DELL PROVIDES WITH THE PRODUCT. DELL MAKES NO WARRANTIES FOR SERVICE, SOFTWARE, OR NON-DELL BRANDED PRODUCT. SUCH PRODUCT IS PROVIDED BY DELL "AS IS". WARRANTY AND SERVICE FOR NON-DELL BRANDED PRODUCT, IF ANY, IS PROVIDED BY THE ORIGINAL MANUFACTURER, NOT BY DELL. DELL MAKES NO EXPRESS WARRANTIES EXCEPT THOSE STATED IN DELL'S APPLICABLE WARRANTY STATEMENT IN EFFECT ON THE DATE OF THE INVOICE, PACKING SLIP OR ACKNOWLEDGEMENT. WARRANTIES AND SERVICE WILL BE EFFECTIVE, AND DELL WILL BE OBLIGATED TO HONOR ANY SUCH WARRANTIES AND SERVICES, ONLY UPON DELL'S RECEIPT OF PAYMENT IN FULL FOR THE ITEM TO BE WARRANTED OR SERVICED.

5. **Software**. All software is provided subject to the license agreement that is part of the software package and you agree that you will be bound by such license agreement.

6. **Return Policies; Exchanges.** Dell's return policy can be found at **http://www.dell.com/policy/legal/warranty.htm**. You must contact us directly before you attempt to return Product to obtain a Return Material Authorization Number for you to include with your return. You must return Product to us in their original or equivalent packaging. You are responsible for risk of loss, shipping and handling fees for returning or exchanging Product. Additional fees may apply. If you fail to follow the return or exchange instructions and policies provided by Dell, Dell is not responsible whatsoever for Product that is lost, damaged, modified or otherwise processed for disposal or resale. At Dell's discretion, credit for partial returns may be less than invoice or individual component prices due to bundled or promotional pricing.

7. **Changed or Discontinued Product.** Dell's policy is one of ongoing update and revision. Dell may revise and discontinue Product at any time without notice to you and this may affect information saved in your online "cart." Dell will ship Product that have the functionality and performance of the Product ordered, but changes between what is shipped and what is described in a specification sheet or catalog are possible. Parts used in repairing or servicing Product may be new, equivalent-to-new, or reconditioned.

8. **Service and Support.** Service offerings may vary from Product to Product. If you purchase optional services and support from Dell, Dell and/or your third-party service provider will provide such service and support to you in the United States in accordance with the terms and conditions located at **http://www.dell.com/us/en/gen/services/service_service_contracts.htm** or as mailed to you. You may contact Dell for more information, see **http://www1.us.dell.com/content/topics/segtopic.aspx/contact/contact?c= us&l=en&s=gen** for contact information. Dell and/or the third-party service provider may at their discretion, revise their general and optional service and support programs and the terms and conditions that govern them without prior notice to you. Dell has no obligation to provide service or support until Dell has received full payment for the Product or service/support

contract you purchased. Dell is not obligated to provide service or support you purchase through a third party and not Dell.

9. **Limitation of Liability.** DELL DOES NOT ACCEPT LIABILITY BEYOND THE REMEDIES SET FORTH HEREIN, INCLUDING BUT NOT LIMITED TO ANY LIABILITY FOR PRODUCT NOT BEING AVAILABLE FOR USE, LOST PROFITS, LOSS OF BUSINESS OR FOR LOST OR CORRUPTED DATA OR SOFTWARE, OR THE PROVISION OF SERVICES AND SUPPORT. EXCEPT AS EXPRESSLY PROVIDED HEREIN, DELL WILL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY THIRD PARTY. YOU AGREE THAT FOR ANY LIABILITY RELATED TO THE PURCHASE OF PRODUCT, DELL IS NOT LIABLE OR RESPONSIBLE FOR ANY AMOUNT OF DAMAGES ABOVE THE AMOUNT INVOICED FOR THE APPLICABLE PRODUCT. NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, THE REMEDIES SET FORTH IN THIS AGREEMENT SHALL APPLY EVEN IF SUCH REMEDIES FAIL THEIR ESSENTIAL PURPOSE. **DELL IS NOT LIABLE TO YOU FOR WARRANTIES, SUPPORT, OR SERVICE MADE BY OR PURCHASED FROM A THIRD PARTY AND NOT DIRECTLY FROM DELL. DELL IS NOT RESPONSIBLE FOR REPRESENTATIONS OR OMISSIONS MADE BY A THIRD PARTY.**

10. **Applicable Law; Not For Resale or Export.** You agree to comply with all applicable laws and regulations of the various states and of the United States. You agree and represent that you are buying only for your own internal use only, and not for resale or export. Dell has separate terms and conditions governing resale of Product by third parties and transactions outside the United States. Terms and conditions for resale are located at: **www.dell.com/policy/legal/termsofsale.htm.**

11. **Governing Law. THE PARTIES AGREE THAT THIS AGREEMENT, ANY SALES THERE UNDER, OR ANY CLAIM, DISPUTE OR CONTROVERSY (WHETHER IN CONTRACT, TORT, OR OTHERWISE, WHETHER PREEXISTING, PRESENT OR FUTURE, AND INCLUDING STATUTORY, COMMON LAW, AND EQUITABLE CLAIMS) BETWEEN CUSTOMER AND DELL arising from or relating to this agreement, its interpretation, or the breach, termination or validity thereof, the relationships which result from this agreement, Dell's advertising, or any related purchase SHALL, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, BE GOVERNED BY THE LAWS OF THE STATE OF TEXAS, WITHOUT REGARD TO CONFLICTS OF LAWS RULES.**

12. **Headings.** The section headings used herein are for convenience of reference only and do not form a part of these terms and conditions, and no construction or inference shall be derived there from.

Dell-branded hardware products purchased in the U.S. come with either a 90-day, 1-year, 2-year, 3-year, or 4-year limited warranty depending on the product purchased. To determine which warranty came with your hardware product(s), see your packing slip or invoice.

What is covered by this limited warranty?

This limited warranty covers defects in materials and workmanship in your—our end-user customer's—Dell-branded hardware products, including Dell-branded peripheral products.

What is not covered by this limited warranty?

This limited warranty does not cover:

- Software, including the operating system and software added to the Dell-branded hardware products through our factory-integration system, third-party software, or the reloading of software

- Non-Dell-branded and Solution Provider Direct products and accessories

- Problems that result from:

    - External causes such as accident, abuse, misuse, or problems with electrical power

    - Servicing not authorized by Dell

    - Usage that is not in accordance with product instructions

    - Failure to follow the product instructions or failure to perform preventive maintenance

    - Problems caused by using accessories, parts, or components not supplied by Dell

- Products with missing or altered Service Tags or serial numbers

- Products for which Dell has not received payment

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE (OR JURISDICTION TO JURISDICTION). DELL'S RESPONSIBILITY FOR MALFUNCTIONS AND DEFECTS IN HARDWARE IS LIMITED TO REPAIR AND REPLACEMENT AS SET FORTH IN THIS WARRANTY STATEMENT. ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN TIME TO THE TERM OF THE LIMITED WARRANTY PERIOD REFLECTED ON YOUR PACKING SLIP OR INVOICE. NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE LIMITED WARRANTY PERIOD HAS EXPIRED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THIS LIMITATION MAY NOT APPLY TO YOU.

WE DO NOT ACCEPT LIABILITY BEYOND THE REMEDIES PROVIDED FOR IN THIS LIMITED WARRANTY OR FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY LIABILITY FOR THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES, FOR PRODUCTS NOT BEING AVAILABLE FOR USE, OR FOR LOST DATA OR LOST SOFTWARE. OUR LIABILITY WILL BE NO MORE THAN THE AMOUNT YOU PAID FOR THE PRODUCT THAT IS THE SUBJECT OF A CLAIM. THIS IS THE MAXIMUM AMOUNT FOR WHICH WE ARE RESPONSIBLE.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

How long does this limited warranty last?

This limited warranty lasts for the time period indicated on your packing slip or invoice, except for the following Dell-branded hardware:

- Portable computer batteries carry the lesser of either a 1-year limited warranty or the length of the limited warranty for the Dell computer with which the battery is shipped.

- The limited warranty for Power Adapters purchased independent of a system is one year. Power Adapters purchased with a system are covered by the system limited warranty.

- Your PERC 5 battery may provide up to 72 hours of controller cache memory backup power when new. Under the 1-year limited warranty, we warrant that the battery will provide at least 24 hours of backup coverage during the 1-year limited warranty period.

- Projector lamps carry a 90-day limited warranty.

- Memory carries a lifetime limited warranty.

- The limited warranty for monitors purchased independently of a system lasts for the time period indicated on your packing slip or invoice. Monitors purchased with a system are covered by the system limited warranty.

- PDAs, earphones, and remote inline controls carry a 1-year limited warranty.

- Other add-on hardware carries the longer of either a 1-year limited warranty for new parts and a 90-day limited warranty for reconditioned parts or, for both new and reconditioned parts, the remainder of the warranty for the Dell computer on which such parts are installed.

The limited warranty on all Dell-branded products begins on the date of the packing slip or invoice. The warranty period is not extended if we repair or replace a warranted product or any parts. Dell may change the availability of limited warranties, at its discretion, but any changes will not be retroactive.

What do I do if I need warranty service?

Before the warranty expires, please call us at the relevant number listed in the following table. Please also have your Dell Service Tag or order number available.

Web Support	support.dell.com/ContactUs/ContactUsHome.aspx?c=us&l=en&s=gen
Individual Home Consumers:	**U.S. Only**
Hardware Warranty Support	1-800-624-9896
Customer Service	1-800-624-9897
Individual Home Consumers who purchased through an Employee Purchase Program:	
Hardware Warranty Support and Customer Service	1-800-822-8965
Home and Small Business Commercial Customers:	
Support and Customer Service	1-800-456-3355
Medium, Large, or Global Commercial Customers, Healthcare Customers, and Value-Added Resellers (VARs):	
Support and Customer Service	1-800-822-8965
Government and Education Customers:	
Support and Customer Service	1-800-234-1490
Dell-Branded Memory	1-888-363-5150

What will Dell do?

During the 90 days of the 90-day limited warranty and the first year of all other limited warranties: During the 90 days of the 90-day limited warranty and the first year of all other limited warranties, we will repair any Dell-branded hardware products returned to us that prove to be defective in materials or workmanship. If we are not able to repair the product, we will replace it with a comparable product that is new or refurbished.

When you contact us, we will issue a Return Material Authorization Number for you to include with your return. You must return the products to us in their original or equivalent packaging, prepay shipping charges, and insure the shipment or accept the risk if the product is lost or damaged in shipment. We will return the repaired or replacement products to you. We will pay to ship the repaired or replaced products to you if you use an address in the United States (excluding Puerto Rico and U.S. possessions and territories). Otherwise, we will ship the product to you freight collect.

If we determine that the issue is not covered under this warranty, we will notify you and inform you of service alternatives that are available to you on a fee basis.

NOTE: Before you ship the product(s) to us, make sure to back up the data on the hard drive(s) and any other storage device(s) in the product(s). Remove any confidential, proprietary, or personal information and removable media such as floppy disks, CDs, or PC Cards. We are not responsible for any of your confidential, proprietary, or personal information; lost or corrupted data; or damaged or lost removable media.

During the remaining years: For the remaining period of the limited warranty, we will replace any defective part with new or refurbished parts, if we agree that it needs to be replaced. When you contact us, we will require a valid credit card number at the time you request a replacement part, but we will not charge you for the replacement part as long as you return the original part to us within 30 days after we ship the replacement part to you. If we do not receive the original part within 30 days, we will charge to your credit card the then-current standard price for that part.

We will pay to ship the part to you if you use an address in the United States (excluding Puerto Rico and U.S. possessions and territories). Otherwise, we will ship the part freight collect. We will also include a prepaid shipping container with each replacement part for your use in returning the replaced part to us.

NOTE: Before you replace parts, make sure to back up the data on the hard drive(s) and any other storage device(s) in the product(s). We are not responsible for lost or corrupted data.

What if I purchased a service contract?

If your service contract is with Dell, service will be provided to you under the terms of the service agreement. Please refer to that contract for details on how to obtain service.

If you purchased through us a service contract with one of our third-party service providers, please refer to that contract for details on how to obtain service.

How will you fix my product?

We use new and refurbished parts made by various manufacturers in performing warranty repairs and in building replacement parts and systems. Refurbished parts and systems are parts or systems that have been returned to Dell, some of which were never used by a customer. All parts and systems are inspected and tested for quality. Replacement parts and systems are covered for the remaining period of the limited warranty for the product you bought. Dell owns all parts removed from repaired products.

May I transfer the limited warranty?

Limited warranties on systems may be transferred if the current owner transfers ownership of the system and records the transfer with us. The limited warranty on Dell-branded memory may not be transferred. You may record your transfer by going to Dell's website:

l   If you are an Individual Home Consumer, go to **www.dell.com/us/en/dhs/topics/sbtopic_015_ccare.htm**

l   If you are a Home Office, Small, Medium, Large, or Global Commercial Customer, go to **www.dell.com/us/en/dhs/topics/sbtopic_015_ccare.htm**

l   If you are a Government, Education, or Healthcare Customer, or an Individual Home Consumer who purchased through an Employee Purchase Program, go to **www.dell.com/us/en/dhs/topics/sbtopic_015_ccare.htm**

l   If you do not have Internet access, call your customer care representative or call 1-800-624-9897.

All requests to transfer ownership are at Dell's sole discretion. All such transfers will be subject to the terms and conditions of the original service or limited warranty agreement and Dell's terms and conditions of sale located at **www.dell.com**. Dell cannot guarantee the authenticity of the products, limited warranties, service or support, or the accuracy of the listings of products you purchase from a third party.

Dell Return Policy (U.S. Only)

Dell values our relationship with you and offers a return policy for most products that you purchase directly from Dell. Under this policy, you may return to Dell, within the applicable return policy period, products that you purchased directly from Dell for a credit or a refund of the purchase price paid, less shipping and handling and applicable restocking fees.

Hardware Products and Accessories: Unless you have a separate agreement with Dell or except as provided in the section below, all hardware, accessories, peripherals, parts and software that is unopened and still in its/their sealed package or, if delivered electronically, software you have not accepted by clicking the "I agree to these Terms and Conditions" button, may be returned within twenty-one (21) days from the date on the packing slip or invoice for a credit or a refund of the purchase price paid, less shipping and handling and applicable restocking fees.

Exceptions to Dell's 21-day return policy:

l   PowerEdge™, PowerConnect™ and PowerVault™ products may be returned within thirty (30) days from the date on the packing slip or invoice, except that new PowerEdge™ SC servers and n series products purchased from the Small and Medium Business Sales Division may only be returned within fourteen (14) days from the date on the packing slip or invoice.

l   Application software or an operating system that has been installed by Dell may not be returned unless you return the entire computer under the 21-day return policy, if applicable to your purchase (if not applicable to your purchase, you may not return application software or an operating system).

l   Dell/EMC storage products, EMC-branded products, Unisys-branded products, PowerVault™ 160T tape libraries, enterprise software, non-Dell branded enterprise products, software and/or software licenses purchased under any type of volume purchase agreement or any non-Dell customized hardware and/or software product(s) may not be returned at any time.

Restocking Fees: Unless the product is defective or the return is a direct result of a Dell error, a restocking fee of 15% may be charged on hardware, accessories, peripherals, parts and unopened software still in its/their sealed package.

How to Return: To return products, you must contact Dell customer service (**www.dell.com/us/en/gen/contact.htm**) and receive a Credit Return Authorization Number within the return policy period applicable to the product you want to return. You must obtain a Credit Return Authorization Number in order to return the product. See "Contacting Dell" or "Getting Help" in your customer documentation or the above website to find the appropriate contact information for obtaining customer assistance.

You must ship the products to Dell within five (5) days of the date that Dell issues the Credit Return Authorization Number. You must:

l   Ship back **all** products you are seeking to return to Dell. At Dell's discretion, credit for partial returns may be less than invoice or individual component prices due to bundled or promotional pricing and any unadvertised discounts or concessions.

l   Return the products in their original packaging, in as-new condition along with any media, documentation, and all other items that were included in the original shipment.

l   Ship the product(s) at your expense, and insure the shipment or accept the risk of loss or damage during shipment.

Upon receipt of the complete returned purchase, Dell will issue a credit or a refund of the purchase price paid, less shipping and handling and applicable restocking fees.

![note icon] **NOTE:** Before you ship the product(s) to us, make sure to back up the data on the hard drive(s) and any other storage device(s) in the product(s). Remove any confidential, proprietary or personal information, removable media, such as floppy disks, CDs, or PC Cards. We are not responsible for any of your confidential, proprietary or personal information; lost or corrupted data; or damaged or lost removable media.

CAUTION:General Safety Instructions

Use the following safety guidelines to help ensure your own personal safety and to help protect your equipment and working environment from potential damage.

![note icon] **NOTE:** In this section, *equipment* refers to all portable devices (computers, port replicators, media bases, docking stations, and similar devices), desktop computers, and monitors. After reading this section, be sure to read the safety instructions pertaining to your specific equipment.

IMPORTANT NOTICE FOR USE IN HEALTHCARE ENVIRONMENTS: Dell products are not medical devices and are not listed under UL or IEC 60601 (or equivalent). As a result, they must not be used within 6 feet of a patient or in a manner that directly or indirectly contacts a patient.

SAFETY: General Safety

When setting up the equipment for use:

l   Place the equipment on a hard, level surface. Leave 10.2 cm (4 in) minimum of clearance on all vented sides of the computer to permit the airflow required for proper ventilation. Restricting airflow can damage the computer or cause a fire.

l   Do not stack equipment or place equipment so close together that it is subject to re-circulated or preheated air.

![note icon] **NOTE:** Review the weight limits referenced in your computer documentation before placing a monitor or other devices on top of your computer.

l   Ensure that nothing rests on your equipment's cables and that the cables are not located where they can be stepped on or tripped over.

l   Do not place your equipment in a closed-in wall unit or on a bed, sofa, or rug.

l   Keep your device away from radiators and heat sources.

l   Keep your equipment away from extremely hot or cold temperatures to ensure that it is used within the specified operating range.

l   Do not push any objects into the air vents or openings of your equipment. Doing so can cause fire or electric shock by shorting out interior components.

l   Avoid placing loose papers underneath your device. Do not place your device in a closed-in wall unit, or on a soft, fabric surface such as a bed, sofa, carpet, or a rug.

When operating your equipment:

l   Do not use your equipment in a wet environment, for example, near a bath tub, sink, or swimming pool or in a wet basement.

l   Do not use AC powered equipment during an electrical storm. Battery powered devices may be used if all cables have been disconnected.

l   If your device includes an integrated or optional (PC card) modem, disconnect the modem cable if an electrical storm is approaching to avoid the remote risk of electric shock from lightning via the telephone line.

l   If your device includes a modem, the cable used with the modem should be manufactured with a minimum wire size of 26 American wire gauge (AWG) and an FCC compliant RJ-11 modular plug.

l   This product may contain Optical Disk Drives (ODD), such as a CD-ROM, CDR/W, DVD drive, etc., which have built-in laser devices. To prevent any risk of exposure to laser radiation, do not disable or open any ODD assembly for any reason.

These ODDs comply with safety requirements and are classified as Class 1 Laser Products, under the US DHHS Standard and IEC/EN60825-1 Laser Safety Standard. These ODD devices contain no user adjustments nor any user serviceable or replaceable parts.

l   Do not spill food or liquids on your equipment.

l   Before you clean your equipment, disconnect it from the electrical outlet. Clean your device with a soft cloth dampened with water. Do not use liquids or aerosol cleaners, which may contain flammable substances.

l   Clean the portable computer or monitor display with a soft, clean cloth and water. Apply the water to the cloth, then stroke the cloth across the display in one direction, moving from the top of the display to the bottom. Remove moisture from the display quickly and keep the display dry. Long-term exposure to moisture can damage the display. Do not use a commercial window cleaner to clean your display.

![caution icon] **CAUTION: Do not operate your equipment with any cover(s) (including computer covers, bezels, filler brackets, front-panel inserts, etc.) removed.**

l   If your equipment does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service center.

SAFETY: When Working Inside Your Device

Do not attempt to service the equipment yourself, except as explained in your Dell documentation or in instructions otherwise provided to you by Dell.

Always follow installation and service instructions closely.

l   To help avoid the potential hazard of electric shock, do not connect or disconnect any cables, or perform maintenance or reconfiguration of your equipment during an electrical storm.

PC Cards may become very warm during normal operation. Use care when removing PC Cards after their continuous operation.

SAFETY: General Power Safety

Observe the following guidelines when connecting your equipment to a power source:

l   Check the voltage rating before you connect the equipment to an electrical outlet to ensure that the required voltage and frequency match the available power source.

l   Your device is equipped with either an internal power source or an external adapter. For internal power sources, your device is equipped with one of the following:

o   An auto-sensing voltage circuit - Devices with an auto-sensing voltage circuit do not have a voltage selection switch on the back panel and automatically detect the correct operating voltage.

OR

o   A manual voltage selection switch - Devices with a voltage selection switch on the back panel must be manually set to operate at the correct operating voltage. Set the switch to the position that most closely matches the voltage used in your location.

NOTE: The switch on your system may be different than the one pictured.

To help avoid damaging a computer with a manual voltage selection switch, set the switch for the voltage that most closely matches the AC power available in your location.

For Japan, the voltage selection switch must be set to the 115-V position even though the AC power available in Japan is 100 V. Also, ensure that your monitor and attached devices are electrically rated to operate with the AC power available in your location.

l   Do not plug the equipment power cables into an electrical outlet if the power cable is damaged.

l   To prevent electric shock, plug the equipment power cables into properly grounded electrical outlets. If the equipment is provided with a 3-prong power cable, do not use adapter plugs that bypass the grounding feature, or remove the grounding feature from the plug or adapter.

l   Norway and Sweden: If this product is provided with a 3-prong power cable, connect the power cable to a grounded electrical outlet only.

l   If you use an extension power cable, ensure that the total ampere rating of the products plugged in to the extension power cable does not exceed the ampere rating of the extension cable.

l   If you must use an extension cable or power strip, ensure the extension cable or power strip is connected to a wall power outlet and not to another extension cable or power strip. The extension cable or power strip must be designed for grounded plugs and plugged into a grounded wall outlet.

l   If you are using a multiple-outlet power strip, use caution when plugging the power cable into the power strip. Some power strips may allow you to insert a plug incorrectly. Incorrect insertion of the power plug could result in permanent damage to your equipment, as well as risk of electric shock and/or fire. Ensure that the ground prong of the power plug is inserted into the mating ground contact of the power strip.

l   Be sure to grasp the plug, not the cable, when disconnecting equipment from an electric socket.

If your equipment uses an AC adapter:

l   Use only the Dell provided AC adapter approved for use with this device. Use of another AC adapter may cause a fire or explosion.

Refer to your system rating label for information on the proper adapter model approved for use with your device.

l   Place the AC adapter in a ventilated area, such as a desk top or on the floor, when you use it to run the computer or to charge the battery. Do not cover the AC adapter with papers or other items that will reduce cooling; also, do not use the AC adapter inside a carrying case.

l   The AC adapter may become hot during normal operation of your computer. Use care when handling the adapter during or immediately after operation.

l   It is recommended that you lay the adapter on the floor or desk so that the green light is visible. This will alert you if the adapter should accidentally go off due to external effects. If for any reason the green light goes off, disconnect the AC power cord from the wall for a period of ten seconds, and then reconnect the power cord.

l   Japan Only: Use only the Dell-provided AC power cable with the AC adapter. Use of any other power cable may damage the device or AC adapter or may present risk of fire or electric shock.

⚠ **CAUTION: When preparing your AC adapter for travel, wrap both of the cords around the adapter in the same direction as shown in the following picture. Failure to wrap the cords in the correct direction can result in damage to the cords not covered by the adapter warranty. Never use an AC adapter that shows signs of damage or excessive wear.**
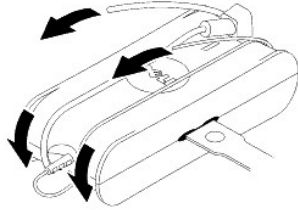

Connecting the AC Plug Adapter (Japan Only)

⚠ **CAUTION: When using the AC plug adapter, do not permit contact between the green ground wire and power leads because electrical shock, fire, or damage to your computer can occur.**

✎ **NOTE:** Some devices available in Japan do not include the AC plug adapter.

1. Connect the metal ground connector to the grounding source on the outlet:

   a. Loosen the grounding source.

   b. Slide the metal ground connector behind the grounding source, and then tighten the grounding source.
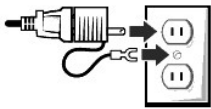
2. Connect the AC power cable to the outlet.

SAFETY: If Your Device Gets Wet

⚠ **CAUTION: Before you begin any of the procedures in this section, see the <u>SAFETY: General Safety</u> section of this document.**

⚠ **CAUTION: Perform this procedure only after you are certain that it is safe to do so. If the computer is connected to an electrical outlet, turn off the AC power at the circuit breaker, if possible, before attempting to remove the power cables from the electrical outlet. Use the utmost caution when removing wet cables from a live power source.**

1. Disconnect the AC adapter from the electrical outlet, and then, if possible, disconnect the AC adapter from the device.

2. Turn off any attached external devices, then disconnect them from their power sources, and then from the device.

3. For Portables : Remove the main battery from the battery bay, and if necessary, the second battery from the module bay.

   Wipe off the batteries and put them in a safer place to dry.

4. Contact Dell support (see your User's Guide or Owner's Manual for the appropriate contact information).

✎ **NOTE:** See the Limited Warranties and Return Policy section of this document or separate paper warranty document that shipped with your monitor or computer for information on your warranty coverage.

SAFETY: If You Drop or Damage Your Computer or Monitor

⚠️ **CAUTION: Before you begin any of the procedures in this section, see the SAFETY: General Safety and Power Safety sections of this document.**

⚠️ **CAUTION: If any internal components can be seen through damaged portions, or if smoke or unusual odors are detected, disconnect the device from the electrical outlet and contact Dell support. See your User's Guide or Owner's Manual for the appropriate contact information.**

1. Save and close any open files, exit any open programs, and shut down the computer.

2. Disconnect the computer or monitor AC adapter from the electrical outlet, and then, if possible, disconnect the AC adapter from the computer or monitor.

3. Turn off any attached external devices, then disconnect them from their power sources, and then from the computer.

4. If provided, remove and then reinstall the battery. If not battery powered, connect the device to the electrical outlet.

5. Turn on the device.

If the device does not start, or if and smoke or unusual odors are detected, or if you cannot identify the damaged components, contact Dell (see your User's Guide or Owner's Manual for the appropriate contact information).

📝 **NOTE:** See the Limited Warranties and Return Policy section of this document or separate paper warranty document that shipped with your monitor or computer for information on your warranty coverage.

 CAUTION: Monitor Safety Instructions

Review the sections on General Safety Instructions and Power Safety in this document.

Read and follow these instructions when connecting and using your computer monitor:

⚠️ **CAUTION: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.**

l Always be sure that your monitor is electrically rated to operate with the AC power available in your location.

NOTE: This monitor does not need or have a voltage selection switch for setting the AC voltage input. It will automatically accept any AC input voltage according to the ranges defined in the "Electrical Specifications" section in the *User's Guide*.

l Place the monitor on a solid surface and treat it carefully. The screen is made of glass and can be damaged if dropped or hit sharply.

l Keep flat panel monitor in room temperature conditions. Excessive cold or hot conditions can have an adverse effect on the liquid crystal of the display.

l Do not subject the monitor to severe vibration or high impact conditions. For example, do not place the monitor inside a car trunk.

l Unplug the monitor when it is going to be left unused for an extended period of time.

l To avoid electric shock, do not attempt to remove any cover or touch the inside of the monitor. Only a qualified service technician should open the monitor case.

Contacting Dell

You can contact Dell through the Internet and by phone:

l For support through the web, go to **support.dell.com**.

l For worldwide support through the web, use the **Choose A Country/Region** menu near the bottom of the page, or see the web addresses listed in the following table.

l For support by e-mail, see the e-mail addresses listed in the following table.

📝 **NOTE:** Toll-free numbers are for use within the country for which they are listed.

📝 **NOTE:** In certain countries, support specific to Dell™ XPS™ computers is available at a separate telephone number listed for participating countries. If you do not see a telephone number listed that is specific for XPS computers, you may contact Dell through the support number listed and your call will be routed appropriately.

l For support by phone, use the phone numbers and codes provided in the following table. If you need assistance in determining which codes to use, contact a local or an international operator.

📝 **NOTE:** The contact information provided was deemed correct at the time that this document went to print and is subject to change.

Country (City) International Access Code Country Code City Code	Service Type	Area Codes, Local Numbers, and Toll-Free Numbers Web and E-mail Address
Anguilla	Online Support	www.dell.com/ai
	E-mail Address	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free: 800**-335-0031
Antigua and Barbuda	Online Support	www.dell.com/ag la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-800-805-5924
Aomen Country Code: **853**	**Technical Support**	toll-**free: 0800**-105
	Customer Service (Xiamen, China)	34 160 910
	Transaction Sales (Xiamen, China)	29 693 115
Argentina (Buenos Aires) International Access Code: **00** Country Code: **54** City Code: **11**	Online Support	www.dell.com/ar
	E-mail for Desktops and Portables	la-techsupport@dell.com
	E-mail for Servers and EMC® Storage Products	la_enterprise@dell.com
	Customer Service	toll-**free: 0-800**-444-0730
	Technical Support – Dell PowerApp™, Dell PowerEdge™, Dell PowerConnect™, and Dell PowerVault™	toll-**free: 0-800**-222-0154
	Technical Support Services	toll-**free: 0-800**-444-0724
	Sales	0-810-444-3355
Aruba	Online Support	**www.dell.com/aw** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free: 800**-1578
Australia (Sydney) International Access Code: **0011** Country Code: **61** City Code: **2**	Online Support	**support.ap.dell.com** support.ap.dell.com/contactus
	Technical Support	
	Technical Support for XPS computers only	toll-**free: 1300 790 877**
	Home and Home Office	toll-**free: 1300**-655-533
	Medium and Large Business	toll-**free: 1800**-633-559
	Small Business, Education, Local Government	toll-**free: 1800**-060-889
	Customer Service	toll-**free: 1300**-662-196
Austria (Vienna) International Access Code: **900** Country Code: **43** City Code: **1**	Online Support	**support.euro.dell.com** tech_support_central_europe@dell.com
	Technical Support for XPS computers only	08 20 24 05 30 81
	Home/Small Business Sales	08 20 24 05 30 00
	Home/Small Business Fax	08 20 24 05 30 49
	Home/Small Business Customer Service	08 20 24 05 30 14
	Home/Small Business Support	08 20 24 05 30 17
	Preferred Accounts/Corporate Customer Service	08 20 24 05 30 16
	Preferred Accounts/Corporate Support	08 20 24 05 30 17
	Switchboard	08 20 24 05 30 00
Bahamas	Online Support	**www.dell.com/bs** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free: 1-866**-874-3038
Barbados	Online Support	www.dell.com/bb la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-800-534-3142
Belgium (Brussels) International Access Code: **00** Country Code: **32** City Code: **2**	Online Support	**support.euro.dell.com**
	Technical Support for XPS computers only	02 481 92 96
	General Support	02 481 92 88
	General Support Fax	02 481 92 95
	Customer Service	02 713 15 65
	Corporate Sales	02 481 91 00
	Fax	02 481 92 99
	Switchboard	02 481 91 00
		www.dell.com/bm

Bermuda	Online Support	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-877-890-0751
Bolivia	Online Support	www.dell.com/bo
		la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free:** 800-10-0238
Brazil	Online Support	**www.dell.com/br**
		BR_TechSupport@dell.com
International Access Code: **00**	Customer Service and Tech Support	0800 970 3355
Country Code: **55**	Technical Support Fax	51 2104 5470
City Code: **51**	Customer Service Fax	51 2104 5480
	Sales	0800 970 3390
British Virgin Islands	Technical Support, Customer Service, Sales	toll-**free:** 1-866-278-6820
Brunei	Technical Support (Penang, Malaysia)	604 633 4966
	Customer Service (Penang, Malaysia)	604 633 3101
		or toll-free: 801 1012
Country Code: **673**	Transaction Sales (Penang, Malaysia)	604 633 3101
		or toll-free: 801 1012
	Online Order Status	**www.dell.ca/ostatus**
	Online Support	support.ca.dell.com
	AutoTech (automated Hardware and Warranty Support)	toll-**free:** 1-800-247-9362
	Customer Service	
	Home/Home Office	toll-**free:** 1-800-847-4096
	Small Business	toll-**free:** 1-800-906-3355
	Medium/Large Business, Government, Education	toll-**free:** 1-800-387-5757
	Hardware Warranty Phone Support	
Canada (North York, Ontario)	XPS Computers Only	toll-**free:** 1-866-398-8977
International Access Code: **011**	Computers for Home/Home Office	toll-**free:** 1-800-847-4096
	Computers for Small/Medium/Large Business, Government	toll-**free:** 1-800-387-5757
	Printers, Projectors, Televisions, Handheld, Digital Jukebox, and Wireless	1-877-335-5767
	Sales	
	Home and Home Office Sales	toll-**free:** 1-800-999-3355
	Small Business	toll-**free:** 1-800-387-5752
	Medium/Large Business, Government	toll-**free:** 1-800-387-5755
	Spare Parts and Extended Service	1 866 440 3355
Cayman Islands	Online Support	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-877-262-5415
Chile (Santiago)	Online Support	**www.dell.com/cl**
		la-techsupport@dell.com
Country Code: **56**	Sales and Customer Support	toll-**free:** 1230-020-3397
City Code: **2**		or 800-20-1385
	Online Support	**support.dell.com/cn**
	Technical Support E-mail	support.dell.com/cn/email
	Customer Service E-mail	customer_cn@dell.com
	Technical Support Fax	592 818 1350
	Technical Support – XPS computers only	toll-**free:** 800 858 0540
	Technical Support – Dell™ Dimension™ and Dell Inspiron™	toll-**free:** 800 858 2969
	Technical Support – Dell OptiPlex™, Dell Latitude™, and Dell Precision™	toll-**free:** 800 858 0950
	Technical Support – Servers and Storage	toll-**free:** 800 858 0960
	Technical Support – Projectors, PDAs, Switches, Routers, etc.	toll-**free:** 800 858 2920
	Technical Support – Printers	toll-**free:** 800 858 2311
China (Xiamen)	Customer Service	toll-**free:** 800 858 2060
Country Code: **86**	Customer Service Fax	592 818 1308
	Home and Small Business	toll-**free:** 800 858 2222
City Code: **592**	Preferred Accounts Division	toll-**free:** 800 858 2557
	Large Corporate Accounts GCP	toll-**free:** 800 858 2055

	Large Corporate Accounts Key Accounts	toll-**free:** 800 858 2628
	Large Corporate Accounts North	toll-**free:** 800 858 2999
	Large Corporate Accounts North Government and Education	toll-**free:** 800 858 2955
	Large Corporate Accounts East	toll-**free:** 800 858 2020
	Large Corporate Accounts East Government and Education	toll-**free:** 800 858 2669
	Large Corporate Accounts Queue Team	toll-**free:** 800 858 2572
	Large Corporate Accounts South	toll-**free:** 800 858 2355
	Large Corporate Accounts West	toll-**free:** 800 858 2811
	Large Corporate Accounts Spare Parts	toll-**free:** 800 858 2621
Colombia	Online Support	**www.dell.com/co** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	01-800-915-4755
Costa Rica	Online Support	**www.dell.com/cr** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	0800-012-0231
Czech Republic (Prague) International Access Code: **00** Country Code: **420**	Online Support	**support.euro.dell.com** czech_dell@dell.com
	Technical Support	22537 2727
	Customer Service	22537 2707
	Fax	22537 2714
	Technical Fax	22537 2728
	Switchboard	22537 2711
Denmark (Copenhagen) International Access Code: **00** Country Code: **45**	Online Support	**support.euro.dell.com**
	Technical Support for XPS computers only	7010 0074
	Technical Support	7023 0182
	Customer Service – Relational	7023 0184
	Home/Small Business Customer Service	3287 5505
	Switchboard – Relational	3287 1200
	Switchboard Fax – Relational	3287 1201
	Switchboard – Home/Small Business	3287 5000
	Switchboard Fax – Home/Small Business	3287 5001
Dominica	Online Support	**www.dell.com/dm** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free:** 1-866-278-6821
Dominican Republic	Online Support	**www.dell.com/do** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-800-156-1588
Ecuador	Online Support	**www.dell.com/ec** la-techsupport@dell.com
	Technical Support, Customer Service, Sales (calling from Quito)	toll-**free:** 999-119-877-655-3355
	Technical Support, Customer Service, Sales (calling from Guayaquil)	toll-**free:** 1800-999-119-877-655-3355
El Salvador	Online Support	**www.dell.com/sv** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	800-6132
Finland (Helsinki) International Access Code: **990** Country Code: **358** City Code: **9**	Online Support	**support.euro.dell.com** fi_support@dell.com
	Technical Support	0207 533 555
	Customer Service	0207 533 538
	Switchboard	0207 533 533
	Fax	0207 533 530
	Sales under 500 employees	0207 533 540
	Sales over 500 employees	0207 533 533
	Online Support	**support.euro.dell.com**
	Technical Support for XPS computers only	0825 387 129
	Home and Small Business	
	Technical Support	0825 387 270

	Customer Service	0825 823 833
France (Paris) (Montpellier)	Switchboard	0825 004 700
	Switchboard (calls from outside of France)	04 99 75 40 00
International Access Code: **00**	Sales	0825 004 700
	Fax	0825 004 701
Country Code: **33**	Fax (calls from outside of France)	04 99 75 40 01
City Codes: **(1) (4)**	**Corporate**	
	Technical Support	0825 004 719
	Customer Service	0825 338 339
	Switchboard	01 55 94 71 00
	Sales	01 55 94 71 00
	Fax	01 55 94 71 01
	Online Support	**support.euro.dell.com**
		tech_support_central_europe@dell.com
Germany (Frankfurt)	Technical Support for XPS computers only	069 9792 7222
	Technical Support	069 9792-7200
International Access Code: **00**	Home/Small Business Customer Service	0180-5-224400
	Global Segment Customer Service	069 9792-7320
Country Code: **49**	Preferred Accounts Customer Service	069 9792-7320
City Code: **69**	Large Accounts Customer Service	069 9792-7320
	Public Accounts Customer Service	069 9792-7320
	Switchboard	069 9792-7000
	Online Support	**support.euro.dell.com**
	Technical Support	00800-44 14 95 18
Greece	Gold Service Technical Support	00800-44 14 00 83
International Access Code: **00**	Switchboard	2108129810
	Gold Service Switchboard	2108129811
Country Code: **30**	Sales	2108129800
	Fax	2108129812
	Online Support	www.dell.com/gd
Grenada		la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free:** 1-866-540-3355
	Online Support	www.dell.com/gt
Guatemala		la-techsupport@dell.com
	Technical Support, Customer Service, Sales	1-800-999-0136
Guyana	Online Support	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free:** 1-877-270-4609
	Online Support	support.ap.dell.com
		support.dell.com/cn/email
	Technical Support – XPS computers only	00852-3416 6923
	Technical Support – Dimension and Inspiron	00852-2969 3188
Hong Kong	Technical Support – OptiPlex, Latitude, and Dell Precision	00852-2969 3191
International Access Code: **001**	Technical Support – Servers and Storage	00852-2969 3196
	Technical Support – Projectors, PDAs, Switches, Routers, etc.	00852-3416 0906
Country Code: **852**	Customer Service	00852-3416 0910
	Large Corporate Accounts	00852-3416 0907
	Global Customer Programs	00852-3416 0908
	Medium Business Division	00852-3416 0912
	Home and Small Business Division	00852-2969 3105
	Online Support	support.ap.dell.com
	Portable and Desktop Support	
	Desktop Support E-mail	india_support_desktop@dell.com
	Portable Support E-mail	india_support_notebook@dell.com
	Phone Numbers	080-25068032 or 080-25068034 or your city STD code + 60003355 or toll-**free:** 1-800-425-8045
	Server Support	
	E-mail	india_support_Server@dell.com

	Phone Numbers	080-25068032 or 080-25068034 or your city STD code + 60003355 or toll-**free: 1800 425 8045**
	Gold Support Only	
	E-mail	eec_ap@dell.com
India	Phone Numbers	080-25068033 or your city STD code + 60003355 or toll-**free: 1-800-425-9045**
	XPS Support Only	
	E-mail	Indiaxps_AP@dell.com
	Phone Numbers	080-25068066 or toll-**free: 1-800-425-2066**
	Customer Service	
	Home and Small Business	India_care_HSB@dell.com toll-free: 1800-4254051
	Large Corporate Accounts	India_care_REL@dell.com toll-free: 1800-4252067
	Sales	
	Large Corporate Accounts	1600 33 8044
	Home and Small Business	1600 33 8046
Ireland (Cherrywood) International Access Code: **00** Country Code: **353** City Code: **1**	Online Support	**support.euro.dell.com** dell_direct_support@dell.com
	Technical Support	
	XPS computers only	1850 200 722
	Business computers	1850 543 543
	Home computers	1850 543 543
	At Home Support	1850 200 889
	Sales	
	Home	1850 333 200
	Small Business	1850 664 656
	Medium Business	1850 200 646
	Large Business	1850 200 646
	Sales E-mail	Dell_IRL_Outlet@dell.com
	Customer Service	
	Home and Small Business	01 204 4014
	Business (greater than 200 employees)	1850 200 982
	General	
	Fax/Sales Fax	01 204 0103
	Switchboard	01 204 4444
	U.K. Customer Service (dial within U.K. only)	0870 906 0010
	Corporate Customer Service (dial within U.K. only)	0870 907 4499
	U.K. Sales (dial within U.K. only)	0870 907 4000
Italy (Milan) International Access Code: **00** Country Code: **39** City Code: **02**	Online Support	**support.euro.dell.com**
	Home and Small Business	
	Technical Support	02 577 826 90
	Customer Service	02 696 821 14
	Fax	02 696 821 13
	Switchboard	02 696 821 12
	Corporate	
	Technical Support	02 577 826 90
	Customer Service	02 577 825 55
	Fax	02 575 035 30
	Switchboard	02 577 821
Jamaica	Online Support	la-techsupport@dell.com
	Technical Support, Customer Service, Sales (dial from within Jamaica only)	1-800-440-9205
	Online Support	**support.jp.dell.com**
	Technical Support – XPS computers only	toll-**free: 0120-937-786**
	Technical Support outside of Japan – XPS computers only	81-44-520-1235
	Technical Support – Dimension and Inspiron	toll-free: 0120-198-226

	Technical Support outside of Japan – Dimension and Inspiron	81-44-520-1435
	Technical Support – Dell Precision, OptiPlex, and Latitude	toll-free: 0120-198-433
	Technical Support outside of Japan – Dell Precision, OptiPlex, and Latitude	81-44-556-3894
	Technical Support – Dell PowerApp, Dell PowerEdge, Dell PowerConnect, and Dell PowerVault	toll-free: 0120-198-498
Japan (Kawasaki)	Technical Support outside of Japan – PowerApp, PowerEdge, PowerConnect, and PowerVault	81-44-556-4162
International Access Code: **001**	Technical Support – Projectors, PDAs, Printers, Routers	toll-free: 0120-981-690
	Technical Support outside of Japan – Projectors, PDAs, Printers, Routers	81-44-556-3468
Country Code: **81**	Faxbox Service	044-556-3490
City Code: **44**	24-Hour Automated Order Status Service	044-556-3801
	Customer Service	044-556-4240
	Business Sales Division – up to 400 employees	044-556-1465
	Preferred Accounts Division Sales – over 400 employees	044-556-3433
	Public Sales – government agencies, educational institutions, and medical institutions	044-556-5963
	Global Segment Japan	044-556-3469
	Individual User	044-556-1657
	Individual User Online Sales	044-556-2203
	Individual User Real Site Sales	044-556-4649
	Switchboard	044-556-4300
	Online Support	support.ap.dell.com
Korea (Seoul)	Technical Support for XPS computers only	toll-free: 080-999-0283
International Access Code: **001**	Technical Support, Customer Service	toll-free: 080-200-3800
	Technical Support – Dimension, PDA, Electronics, and Accessories	toll-free: 080-200-3801
Country Code: **82**	Sales	toll-free: 080-200-3600
City Code: **2**	Fax	2194-6202
	Switchboard	2194-6000
	Customer Technical Support (Austin, Texas, U.S.A.)	512 728-4093
	Customer Service (Austin, Texas, U.S.A.)	512 728-3619
Latin America	Fax (Technical Support and Customer Service) (Austin, Texas, U.S.A.)	512 728-3883
	Sales (Austin, Texas, U.S.A.)	512 728-4397
	Sales Fax (Austin, Texas, U.S.A.)	512 728-4600 or 512 728-3772
	Online Support	support.euro.dell.com
Luxembourg	Support	342 08 08 075
International Access Code: **00**	Home/Small Business Sales	+32 (0)2 713 15 96
	Corporate Sales	26 25 77 81
Country Code: **352**	Customer Service	+32 (0)2 481 91 19
	Fax	26 25 77 82
	Online Support	support.ap.dell.com
	Technical Support – XPS computers only	toll-free: 1 800 885 784
Malaysia (Penang)	Technical Support – Dell Precision, OptiPlex, and Latitude	toll-free: 1 800 880 193
International Access Code: **00**	Technical Support – Dimension, Inspiron, and Electronics and Accessories	toll-free: 1 800 881 306
Country Code: **60**	Technical Support – PowerApp, PowerEdge, PowerConnect, and PowerVault	toll-free: 1800 881 386
City Code: **4**	Customer Service	toll-free: 1800 881 306 (option 6)
	Transaction Sales	toll-free: 1 800 888 202
	Corporate Sales	toll-free: 1 800 888 213
	Online Support	www.dell.com/mx la-techsupport@dell.com
	Technical Support	001-866-563-4425
Mexico	Sales	50-81-8800 or 001-800-888-3355
International Access Code: **00**	Customer Service	001-877-384-8979 or 001-877-269-3383
Country Code: **52**		50-81-8800

	Main	or 001-800-888-3355
		or 001-866-851-1754
Montserrat	Online Support	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-free: 1-866-278-6822
Netherlands Antilles	Online Support	la-techsupport@dell.com
	Technical Support, Customer Service, Sales	001-800-882-1519
Netherlands (Amsterdam) International Access Code: **00** Country Code: **31** City Code: **20**	Online Support	**support.euro.dell.com**
	Technical Support for XPS computers only	020 674 45 94
	Technical Support	020 674 45 00
	Technical Support Fax	020 674 47 66
	Home/Small Business Customer Service	020 674 42 00
	Relational Customer Service	020 674 4325
	Home/Small Business Sales	020 674 55 00
	Relational Sales	020 674 50 00
	Home/Small Business Sales Fax	020 674 47 75
	Relational Sales Fax	020 674 47 50
	Switchboard	020 674 50 00
	Switchboard Fax	020 674 47 50
New Zealand International Access Code: **00** Country Code: **64**	Online Support	**support.ap.dell.com** support.ap.dell.com/contactus
	Technical Support for XPS computers only	toll-free: 0800 335 540
	Technical Support, Customer Service, Sales	0800 441 567
Nicaragua	Online Support	www.dell.com/ni la-techsupport@dell.com
	Technical Support, Customer Service, Sales	001-800-220-1377
Norway (Lysaker) International Access Code: **00** Country Code: **47**	Online Support	**support.euro.dell.com**
	Technical Support for XPS computers only	815 35 043
	Technical Support	671 16882
	Relational Customer Service	671 17575
	Home/Small Business Customer Service	23162298
	Switchboard	671 16800
	Fax Switchboard	671 16865
Panama	Online Support	www.dell.com/pa la-techsupport@dell.com
	Technical Support, Customer Service, Sales	011-800-507-1264
Peru	Online Support	www.dell.com/pe la-techsupport@dell.com
	Technical Support, Customer Service, Sales	0800-50-669
Poland (Warsaw) International Access Code: **011** Country Code: **48** City Code: **22**	Online Support	**support.euro.dell.com** pl_support_tech@dell.com
	Customer Service Phone	57 95 700
	Customer Service	57 95 999
	Sales	57 95 999
	Customer Service Fax	57 95 806
	Reception Desk Fax	57 95 998
	Switchboard	57 95 999
Portugal International Access Code: **00** Country Code: **351**	Online Support	**support.euro.dell.com**
	Technical Support	707200149
	Customer Service	800 300 413
	Sales	800 300 410 or 800 300 411 or 800 300 412 or 21 422 07 10
	Fax	21 424 01 12
Puerto Rico	Online Support	www.dell.com/pr la-techsupport@dell.com
	Technical Support	toll-free: 1-866-390-4695 or 1-866-851-1760

	Customer Service and Sales	1-877-537-3355
St. Kitts and Nevis	Online Support	**www.dell.com/kn**
		la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free:** 1-866-540-3355
St. Lucia	Online Support	**www.dell.com/lc**
		la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free:** 1-866-464-4352
St. Vincent and the Grenadines	Online Support	**www.dell.com/vc**
		la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free:** 1-866-464-4353
Singapore (Singapore) International Access Code: **005** Country Code: **65**	**NOTE:** The phone numbers in this section should be called from within Singapore or Malaysia only.	
	Online Support	**support.ap.dell.com**
	Technical Support – XPS computers only	toll-**free:** 1800 394 7464
	Technical Support – Dimension, Inspiron, and Electronics and Accessories	toll-**free:** 1 800 394 7430
	Technical Support – OptiPlex, Latitude, and Dell Precision	toll-**free:** 1 800 394 7488
	Technical Support – PowerApp, PowerEdge, PowerConnect, and PowerVault	toll-**free:** 1 800 394 7478
	Customer Service	toll-**free:** 1 800 394 7430 (option 6)
	Transaction Sales	toll-**free:** 1 800 394 7412
	Corporate Sales	toll-**free:** 1 800 394 7419
Slovakia (Prague) International Access Code: **00** Country Code: **421**	Online Support	**support.euro.dell.com**
		czech_dell@dell.com
	Technical Support	02 5441 5727
	Customer Service	420 22537 2707
	Fax	02 5441 8328
	Tech Fax	02 5441 8328
	Switchboard (Sales)	02 5441 7585
South Africa (Johannesburg) International Access Code: **09/091** Country Code: **27** City Code: **11**	Online Support	**support.euro.dell.com**
		dell_za_support@dell.com
	Gold Queue	011 709 7713
	Technical Support	011 709 7710
	Customer Service	011 709 7707
	Sales	011 709 7700
	Fax	011 706 0495
	Switchboard	011 709 7700
Southeast Asian and Pacific Countries	Technical Support, Customer Service, and Sales (Penang, Malaysia)	604 633 4810
Spain (Madrid) International Access Code: **00** Country Code: **34** City Code: **91**	Online Support	**support.euro.dell.com**
	Home and Small Business	
	Technical Support	902 100 130
	Customer Service	902 118 540
	Sales	902 118 541
	Switchboard	902 118 541
	Fax	902 118 539
	Corporate	
	Technical Support	902 100 130
	Customer Service	902 115 236
	Switchboard	91 722 92 00
	Fax	91 722 95 83
Sweden (Upplands Vasby) International Access Code: **00** Country Code: **46**	Online Support	**support.euro.dell.com**
	Technical Support for XPS computers only	77 134 03 40
	Technical Support	08 590 05 199
	Relational Customer Service	08 590 05 642
	Home/Small Business Customer Service	08 587 70 527
	Employee Purchase Program (EPP) Support	020 140 14 44

City Code: **8**	Technical Support Fax	08 590 05 594
	Sales	08 587 705 81
Switzerland (Geneva) International Access Code: **00** Country Code: **41** City Code: **22**	Online Support	**support.euro.dell.com** Tech_support_central_Europe@dell.com
	Technical Support for XPS computers only	0848 338 857
	Technical Support – Home and Small Business	0844 811 411
	Technical Support – Corporate	0844 822 844
	Customer Service – Home and Small Business	0848 802 202
	Customer Service – Corporate	0848 821 721
	Main	0848 335 599
	Fax	022 799 01 90
	Sales	022 799 01 01
Taiwan International Access Code: **002** Country Code: **886**	Online Support	**support.ap.dell.com** support.dell.com/cn/email
	Technical Support – XPS computers only	toll-**free**: 0080 186 3085
	Technical Support – OptiPlex, Latitude, Inspiron, Dimension, and Electronics and Accessories	toll-**free**: 0080 186 1011
	Technical Support – Servers and Storage	toll-**free**: 0080 160 1256
	Customer Service	toll-**free**: 0080 160 1250 (option 5)
	Transaction Sales	toll-**free**: 0080 165 1228
	Corporate Sales	toll-**free**: 0080 165 1227
Thailand International Access Code: **001** Country Code: **66**	Online Support	**support.ap.dell.com**
	Technical Support (OptiPlex, Latitude, and Dell Precision)	toll-**free**: 1800 0060 07
	Technical Support (PowerApp, PowerEdge, PowerConnect, and PowerVault)	toll-**free**: 1800 0600 09
	Customer Service	toll-**free**: 1800 006 007 (option 7)
	Corporate Sales	toll-**free**: 1800 006 009
	Transaction Sales	toll-**free**: 1800 006 006
Trinidad/Tobago	Online Support	**www.dell.com/tt** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free**: 1-888-799-5908
Turks and Caicos Islands	Online Support	**www.dell.com/tc** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free**: 1-877-441-4735
U.K. (Bracknell) International Access Code: **00** Country Code: **44** City Code: **1344**	Online Support	**support.euro.dell.com** dell_direct_support@dell.com
	Customer Service Online **support.euro.dell.com/uk/en/ECare/form/home.asp**	
	Sales	
	Home and Small Business Sales	0870 907 4000
	Corporate/Public Sector Sales	01344 860 456
	Customer Service	
	Home and Small Business	0870 906 0010
	Corporate	01344 373 185
	Preferred Accounts (500–5000 employees)	0870 906 0010
	Global Accounts	01344 373 186
	Central Government	01344 373 193
	Local Government & Education	01344 373 199
	Health	01344 373 194
	Technical Support	
	XPS Computers Only	0870 366 4180
	Corporate/Preferred Accounts/PCA (1000+ employees)	0870 908 0500
	Other Dell Products	0870 353 0800
	General	
	Home and Small Business Fax	0870 907 4006
Uruguay	Online Support	**www.dell.com/uy** la-techsupport@dell.com

	Technical Support, Customer Service, Sales	toll-**free**: 000-413-598-2521
U.S.A. (Austin, Texas) International Access Code: **011** Country Code: **1**	Dell Services for the Deaf, Hard-of-Hearing, or Speech-Impaired	toll-**free**: 1-877-DELLTTY (1-877-335-5889)
	Fax	toll-**free**: 1-800-727-8320
	Technical Support	support.dell.com
	XPS	toll-**free**: 1-800-232-8544
	Home and Home Office	toll-**free**: 1-800-624-9896
	Portable and Desktop AutoTech	toll-**free**: 1-800-247-9362
	Small Business	toll-**free**: 1-800-456-3355
	Medium and Large Business	toll-**free**: 1-877-671-3355
	State and Local Government	toll-**free**: 1-800-981-3355
	Federal Government	toll-**free**: 1-800-727-1100
	Healthcare	toll-**free**: 1-800-274-1550
	K-12 Education	toll-**free**: 1-888-977-3355
	Higher Education	toll-**free**: 1-800-274-7799
	Printers, Projectors, PDAs, and MP3 Players	toll-**free**: 1-877-459-7298
	Customer Service	toll-**free**: 1-800-624-9897
	Automated Order Status	toll-**free**: 1-800-433-9014
	Small Business	toll-**free**: 1-800-456-3355
	Medium and Large Business	toll-**free**: 1-877-671-3355
	State and Local Government	toll-**free**: 1-800-981-3355
	Federal Government	toll-**free**: 1-800-727-1100
	Healthcare	toll-**free**: 1-800-274-1550
	K-12 Education	toll-**free**: 1-888-977-3355
	Higher Education	toll-**free**: 1-800-274-7799
	Employee Purchase Program (EPP)	toll-**free**: 1-800-695-8133
	Financial Services	**www.dellfinancialservices.com**
	Leases and Loans	toll-**free**: 1-877-577-3355
	Dell Preferred Accounts (DPA)	toll-**free**: 1-800-283-2210
	Sales	1-800-289-**3355 or** 1-800-879-3355
	Dell Outlet Store	toll-**free**: 1-888-798-7561
	Software and Peripherals Sales	toll-**free**: 1-800-671-3355
U.S. Virgin Islands	Online Support	www.dell.com/vi la-techsupport@dell.com
	Technical Support, Customer Service, Sales	toll-**free**: 1-877-702-4360
Venezuela	Online Support	**www.dell.com/ve** la-techsupport@dell.com
	Technical Support, Customer Service, Sales	0800-100-4752

Regulatory Notices

FCC Notice (U.S. Only)

FCC Class B

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

NOTICE: The FCC regulations provide that changes or modifications not expressly approved by Dell Inc. could void your authority to operate this equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the system with respect to the receiver.
- Move the system away from the receiver.
- Plug the system into a different outlet so that the system and the receiver are on different branch circuits.

If necessary, consult a representative of Dell Inc. or an experienced radio/television technician for additional suggestions. duct name. EXAMPLE: Dell™ Latitude™ D410

The following information is provided on the device or devices covered in this document in compliance with the FCC regulations:

- Product name: E157FPT
- Model number: E157FPTe
- Company name:
  Dell Inc.
  Worldwide Regulatory Compliance & Environmental Affairs
  One Dell Way
  Round Rock, TX 78682 USA
  512-338-4400

NOTE: For Further regulatory information, see your *Product Information Guide.*

Recycling Information

Dell recommends that customers dispose of their used computer hardware, monitors, printers, and other peripherals in an environmentally sound manner. Potential methods include reuse of parts or whole products and recycling of products, components, and/or materials.

For specific information on Dell's worldwide recycling programs, see **www.dell.com/recyclingworldwide**.

Your Monitor Setup Guide

To view PDF files (files with an extension of .pdf), click the document title. To save PDF files to your hard drive, right-click the document title, then choose **Save Target As** in Microsoft Internet Explorer, or **Save Link As** in Netscape Navigator, and then specify a location on your hard drive to which you want to save the files.

Setup Guide (.pdf)
Attaching the Magnetic Stripe Reader (MSR) (.pdf)

NOTE: PDF files require Adobe Acrobat Reader, which can be downloaded from the Adobe website at www.adobe.com.

NOTE: To view a PDF file, launch Acrobat Reader. Then click File Open and select the PDF file.

Back to Contents Page

Setting Up Your Monitor
Dell™ E157FPT Touch Screen Monitor Contents

Connecting Your Monitor

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the instructions in the CAUTION:General Safety Instructions section.**

1. Turn off your computer and unplug its power cable.

2. If you have NOT purchased the optional Magnetic Stripe Reader (MSR) kit, skip to step 3.

   If you have purchased the optional MSR kit, remove the MSR and its accessories from the shipping carton.

   o Place the MSR on the rear left side of the monitor.

   o The MSR's large tab should extend towards the center of the monitor. Align the two holes in the MSR tab with the two corresponding holes in the back surface of the monitor, then fasten the MSR to the monitor using the two screws provided in the MSR Kit.

   o Connect the USB cable from the MSR Kit to the USB connector on the lower end of the MSR tab.

   o Run the USB cable through the cable holder on the back of the monitor. Connect the other end of the USB cable to a USB connector on the back of your computer.

3. Place the monitor face down, then remove the cable cover below the stand.
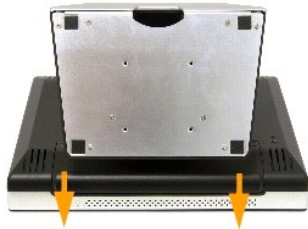
4. Connect the video cable to the corresponding video connector on the back of your computer. (The graphic is for illustration only. System appearance may vary).

5. Connect either the USB touch screen cable or the serial touch screen cable to the back of your computer and then to back of the display.

6. Connect the power cable for your display to the power connector on the back of the display.

7. Replace the cable cover.

8. Plug the power cables of your computer and your display into a nearby outlet. Your monitor is equipped with an automatic power supply for a voltage range from 100 to 240 Volt at a frequency of 50/60 Hz. Be sure that your local power is within the supported range. If you are unsure, ask your electricity supplier.

9. Turn on power to the monitor and your computer.

If your monitor displays an image, installation is complete. If it does not display an image, see Solving Problems.

Using the OSD

Use the control buttons on the right side of the monitor to adjust the characteristics of the image being displayed. As you use these buttons to adjust the controls, an on-screen display (OSD) shows their numeric values.
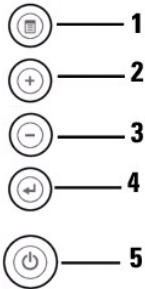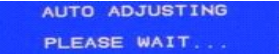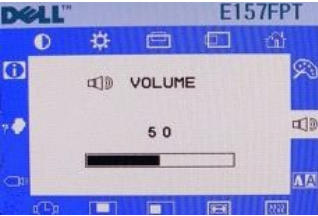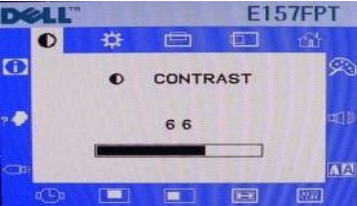
The following table describes the OSD menu buttons and their functions.

1	 MENU	The 'MENU' button is used to open the on-screen display (OSD), exit from menus and sub-menus, and to exit the OSD.
2	 Adjust Up / Contrast	If pressed before the OSD appears, this button directly accesses the Contrast control function. If pressed while the OSD menu is showing, this button either increases the value of the OSD item being adjusted, or it moves the OSD item selection cursor clockwise around the OSD menu.
3	 Adjust Down / Volume	If pressed before the OSD appears, this button directly accesses the Volume adjustment function. If pressed while the OSD menu is showing, this button either decreases the value of the OSD item being adjusted, or it moves the OSD item selection cursor counter-clockwise around the OSD menu.
4	 Select / Auto Adjust	If pressed before the OSD appears, this button activates automatic setup and adjustment. The following dialog will appear on screen as the monitor self-adjusts to the current input: AUTO ADJUSTING PLEASE WAIT... The Auto Adjustment button allows the monitor to self-adjust to the incoming video signal. After using 'Auto Adjustment', you can further tune your monitor by using the 'Pixel Clock' and 'Phase' controls in the OSD. If pressed while the OSD menu is showing, this button selects an OSD item for adjustment.
5	 Power Button	The power status LED is located on the connector panel, near the power cord connector. A green LED indicates the monitor is on and fully functional. An amber LED indicates the monitor is in DPMS power save mode. The Power button turns the monitor on and off.

On-Screen Menu/Display (OSD)

Direct Access Functions

Function	Adjustment Method
Auto Adjustment	While the OSD menu is not showing, use this button to activate automatic setup and adjustment. The following dialog will appear on screen as the monitor self-adjusts to the current input: AUTO ADJUSTING PLEASE WAIT... The Auto Adjustment button allows the monitor to self-adjust to the incoming video signal. After using 'Auto Adjustment', you can further tune your monitor by using the 'Pixel Clock' and 'Phase' controls in the OSD. **NOTE:** Auto Adjust will not occur if you press the button while there are no active video input signals, or attached cables.
Volume	With the menu off, press the ⊖ button to display the 'Volume adjustment function. The "Volume" function adjusts the sound level from the internal speakers. "+" increase 'volume' " - "decrease 'volume'
Contrast	With the menu off, press the ⊕ button to display the Contrast adjustment function. The 'Contrast' function adjusts the degree of difference between darkness and lightness on the display screen. "+" increase the 'contrast' "-" decrease the 'contrast'

Accessing the Menu System
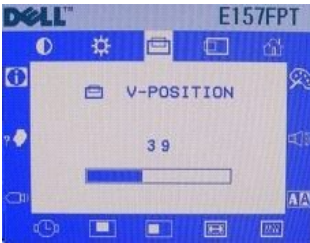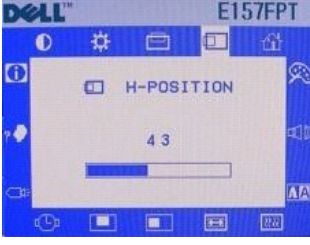
1. With the menu off, press the 'MENU' button to open the OSD system and display the main features menu.
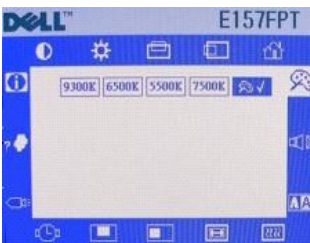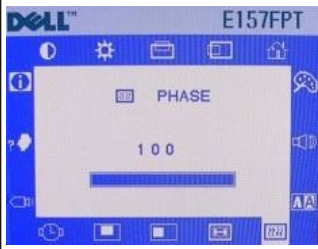
The OSD menu will open with the Contrast function selected.
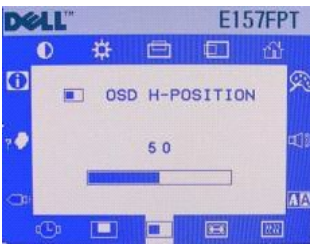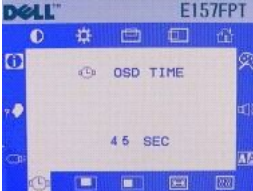
2. Press the - and + buttons to move the OSD highlight cursor to other function icons. As you move from one icon to another, the function name appears, to reflect the function or group of functions (sub-menus) represented by that icon. See the table below for a complete list of all the functions available for the monitor.

3. Press the 'Select' button once to activate the highlighted function.

4. Use the - and + buttons, according to the slide bar or numbers on the menu, to make your changes.

5. Press the 'Select' button to return to the main menu and select another function. Or press the 'Menu' button to exit from the OSD.
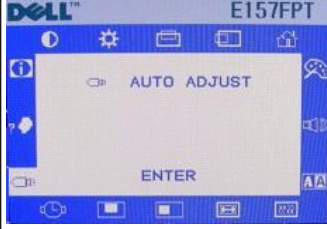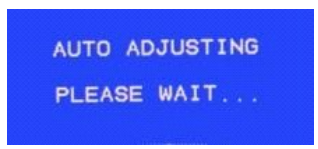
Icon	Menu Name	Description
	CONTRAST	The CONTRAST function varies the intensity difference between dark and light areas on the screen. Pressing "+" will increase the contrast. Pressing "-" will decrease the contrast. Minimum is 0. Maximum is 100.
	BRIGHTNESS	The BRIGHTNESS function varies the luminance of the entire screen. Pressing "+" will increase the brightness. Pressing "-" will decrease the brightness. Minimum is 0. Maximum is 100.
		The V-POSITION function moves the picture up or down in relation to the monitor bezel. Pressing "+" will move the picture up. Pressing "-" will move the picture down. Minimum is 0. Maximum is 100.

	V-POSITION	
	H-POSITION	The H-POSITION function moves the picture left or right in relation to the monitor bezel. Pressing "+" will move the picture right. Pressing "-" will move the picture left. Minimum is 0. Maximum is 100.
	RECALL DEFAULTS	The RECALL DEFAULTS function is used to return all monitor settings to their factory stored values. All settings previously saved by the user will be replaced by their factory values. Pressing "Select" will recall all defaults. Pressing "+", "-", or "Menu" will exit without recalling the factory values.
		The COLOR TEMP function allows selection between several white color temperatures. Choices are 9300K, 6500K, 5500K, 7500K, and USER. Higher numbers will yield a blue tint, and lower numbers will yield a red tint. Selection is a matter of personal preference. With the selection cursor highlighting the COLOR TEMP icon, press "Select" to enter the function. Pressing "+" or "-" will now move the selection cursor between the choices. The screen tint will change, as the cursor is moved. Select the desired choice by pressing "Select". Choosing the User choice will open a sub-menu (described below) which allows individual control of the three primary colors. This choice is recommended only for advanced users.

	COLOR TEMP	
	COLOR TEMP USER	The COLOR TEMP USER function is one of the available COLOR TEMP choices (see above). It allows individual intensity adjustment of the three primary colors (red, blue, green). This choice is recommended only for advanced users. When the USER choice is chosen in the COLOR TEMP function (see above) the COLOR TEMP USER function appears, showing red, blue, and green adjustment bars. Pressing "+" or "-" will move the selection cursor between the red, blue, green, and exit choices. With the selection cursor highlighting the desired R, B, or G icon, press "Select" to enable adjustment of that color. The selected color bar will turn black. Pressing "+" or "-" will increase or decrease that color's intensity, lengthen or shorten its color bar, and change the whole screen's tint. Press "Select" to save the color's adjustment. Press "+" or "-" to move the selection cursor to another color. When satisfied with all color adjustments, move the selection cursor over the Exit icon and press "Select". For each color bar, minimum is 0 and maximum is 100.
	VOLUME	The VOLUME function varies the audio's loudness from the monitor's internal speakers. Pressing "+" will increase the volume. Pressing "-" will decrease the volume. Minimum is 0. Maximum is 100.
		The SHARPNESS function varies the focus of the screen's video. This adjustment should be done while viewing an entire screen of text characters. The normal setting is 0. A setting of 0 is recommended, unless the user is absolutely sure that another setting improves focus quality. Minimum (and normal) is 0. Maximum is 100.

	SHARPNESS	
	PHASE	The PHASE function allows for manual fine adjustment of screen interference. This function is recommended only for advanced users. It is normally adjusted automatically by the AUTO ADJUST function. If a manual setting for improved performance cannot be determined using this function, use the AUTO ADJUST function (described below) to set PHASE automatically. Minimum is 0. Maximum is 100.
	CLOCK	The CLOCK function allows for manual fine adjustment of the monitor's dot clock. This function is recommended only for advanced users. It is normally adjusted automatically by the AUTO ADJUST function. If a manual setting for improved performance cannot be determined using this function, use the AUTO ADJUST function (described below) to set CLOCK automatically. Minimum is 0. Maximum is 100.
		The OSD H-POSITION function moves the OSD Menu window left or right in relation to the monitor bezel. Pressing "+" will move the OSD Menu right. Pressing "-" will move the OSD Menu left. Minimum is 0. Maximum is 100.

	OSD H-POSITION	
	OSD V-POSITION	The OSD V-POSITION function moves the OSD Menu window up or down in relation to the monitor bezel. Pressing "+" will move the OSD Menu up. Pressing "-" will move the OSD Menu down. Minimum is 0. Maximum is 100.
	OSD TIME	The OSD TIME function varies the length of time the OSD Menu window remains visible, after the last time a button was pressed. Pressing "+" will increase the OSD Menu time. Pressing "-" will decrease the OSD Menu time. Minimum is 45 sec. Maximum is 255 sec.
		The AUTO ADJUST function allows your monitor to automatically optimize its display settings, for use with your computer's video output. In most cases, use of the AUTO ADJUST function will result in the best possible image quality for your configuration.

	AUTO ADJUST	 Pressing "Select" will execute the function. Auto Adjustment will take only a few seconds. The OSD Menu will automatically disappear after adjustment is complete.
	OSD LANGUAGE	The OSD LANGUAGE function sets the OSD Menu to one of five choices – English, French, German, Spanish, or Japanese. With the selection cursor highlighting the OSD LANGUAGE icon, press "Select" to enter the function. Pressing "+" or "-" will now move the selection cursor between the choices. Select the desired choice by pressing "Select".
	TIMING INFO	The TIMING INFO function simply displays information about the video signal which your computer is sending to the monitor. Screen resolution, horizontal scan rate (FH), and vertical refresh rate (FV) are displayed. It is recommended that your computer video output be set to a resolution of 1024 x 768, with a vertical refresh rate (FV) of 60Hz. See "Setting the Optimal Resolution" section below.

Special OSD Functions

- OSD LOCK and UNLOCK
- POWER LOCK and UNLOCK
- Automatic Save

OSD LOCK and UNLOCK

Operation of the OSD Menu may be disabled, thereby preventing unauthorized personnel from modifying any OSD adjustments. To "Lock" (disable) the OSD:

1. Press "Menu" and "+" buttons at the same time. A small window will appear, showing the present state of OSD operation.

2. Continue holding "Menu" and "+" buttons until the state of OSD operation changes. Immediately release both buttons.

3. While the OSD operation is in the "Lock" state, all OSD buttons are disabled.

4. To "Unlock" (enable) OSD operation, perform the above steps again, releasing both buttons when the window shows "OSD UNLOCK".

POWER LOCK and UNLOCK

Operation of the Power Button may be disabled, thereby preventing unauthorized personnel from switching the monitor power off. To "Lock" (disable) the Power Button:

1. Press "Menu" and "-" buttons at the same time. A small window will appear, showing the present state of Power Button operation.

2. Continue holding "Menu" and "-" buttons until the state of the Power Button operation changes. Immediately release both buttons.

3. While the Power Button operation is in the "Lock" state, the Power Button is disabled.

4. To "Unlock" (enable) the Power Button operation, perform the above steps again, releasing both buttons when the window shows "POWER UNLOCK".

Automatic Save

With the OSD open, if you make an adjustment and then either proceed to another menu or exit the OSD, the monitor automatically saves any adjustments you have made. If you make an adjustment and then wait for the OSD to disappear the adjustment will also be saved.

OSD Warning Messages

A warning message may appear on the screen indicating that the monitor is out of sync.

This means that the monitor cannot synchronize with the signal that it is receiving from the computer. Either the signal is too high or too low for the monitor to use. See Specifications for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1024 X 768 @ 60Hz.

NOTE: A Test-pattern window will appear on-screen if the monitor cannot sense a video signal.

Occasionally, no warning message appears, but the screen is blank. This could also indicate that the monitor is not synchronizing with the computer.

See Solving Problems for more information.

Setting the Optimal Resolution

For optimal display performance while using the Microsoft® Windows® operating systems, set the display resolution to 1024 x 768 pixels by performing the following steps:

1. Click **Start**, point to **Settings**, and click **Control Panel**.

2. Double-click the Display icon in the **Control Panel** window, and then click the **Settings** tab.

3. In the **Desktop** area, move the slidebar to 1024 by 768 pixels, then click **OK**.

Recommended frequency for best performance is 60Hz.

Back to Contents Page

Solving Problems
Dell™ E157FPT Touch Screen Monitor Contents

- General Problems
- Touch screen Problems

General Problems

Problem	Suggestion
The monitor does not respond after you turn on the system.	Check that the monitor's Power Switch is on.
Characters on the screen are dim. The screen is blank.	Refer to CONTRAST to adjust the brightness. During operation, the monitor screen may automatically turn off as a result of the Power Saving feature. Press any key to see if the screen reappears.
OSD or power buttons don't work	Check to see if they are locked. See OSD LOCK and UNLOCK.
"Out of Range" display	Check to see if the resolution or vertical frequency of your computer is higher than that of the LCD display. Resolution should be set to 1024 x 768. Vertical refresh frequency should be set to 60 Hz.

Touch screen Problems

Problem	Suggestion
Touch doesn't work	Make sure cable is securely attached at both ends.
Video alignment doesn't recognize video resolution.	If you are running an expanded desktop multiple monitor resolution that is not multiples of standard monitor resolutions, you may experience difficulties in calibrating all of your monitors properly. Contact Dell support for help with modifying this file.
Targets do not appear on screen during calibration.	You can define the target locations for every monitor in a configuration file called, EloTarget.conf. Contact Dell Application for help with modifying this file.

Dell™ E157FPT Touch Screen Monitor User's Guide

NOTE: A NOTE indicates important information that helps you make better use of your computer.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

December 2006   Rev. A01

Model E157FPTe

Power Management Modes

This display is ENERGY STAR-compliant.	

Pin Assignments - 15-pin D-sub connector

Plug and Play Capability

Performing a Silent Install

Disabling Touch Functionality

FCC Notice (U.S. Only)

Performing a Silent Install

Disabling Touch Functionality

Notes, Notices, and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your computer.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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Using the Touch Screen Software

Dell™ E157FPT Touch Screen Monitor Contents

About Your Touch Screen Software

Dell provides touch screen software that allows your touchmonitor to work with your computer. Drivers are located on the CD included with your monitor. The Dell Xpu driver supports the E157FPT Touch screen Monitor. While the touch screen software supports both Windows XP and Windows 2000, this manual uses the terminology and descriptions for Windows XP in cases where Windows XP and Windows 2000 differ.

The Dell Touch Screen Software package contains:

- Native 32-bit drivers, for both serial and USB touch screen controllers, designed for Microsoft Windows XP and Windows 2000.

- Touch screen software to set your preferences for the touchmonitor. For example, you can define the following preferences:

    - Whether the touch action occurs when you touch the screen or when you lift your finger (or pen) off the screen.

    - Whether you hear a sound when you touch the screen.

    - How fast you need to touch to produce a double-click.

- A Video Alignment (calibration) utility, that lets you calibrate the touch screen directly without opening the Touch screen software control panel.

- A Touch screen Software Uninstall utility that automatically deletes all Touch screen software components from your computer and removes all Touch screen software entries from the system files.

Installing Touch Screen Software

You can install the Dell Touch Screen drivers in the following ways based on the number and type of controllers you are installing:

- Single Monitor with USB or Serial Controller

- Multiple Monitors with Serial Controllers

- Multiple Monitors with USB Controllers

Refer to the appropriate section below.

Single monitor, USB or Serial controller

1. On the Dell CD, browse to the DellTouchDriver directory, then double-click the DellXpu.exe file.

   Dell Setup launches.

2. Click Yes.

3. Click Unzip to extract driver files.

4. Specify the language for the Xpu driver package.

NOTE: The selected language is used for all Dell components in future on the system. To change the user language you must install the package again on the system. Default selection from the dropdown uses the current users input language from the Windows subsystem.

5. For USB controllers, select **Install USB Touch Screen Drivers**, then click **Next**.

6. For Serial controllers, select **Install Serial Touch Screen Drivers**, then click **Next**.

NOTE: If your serial cable is connected, select **Auto-detect Dell devices** . If you plan to connect the serial cable later, click Next.

7. Click **Next**.

8. Review and accept the License Agreement.

   The driver files are installed. Following installation, the Setup Complete screen appears.
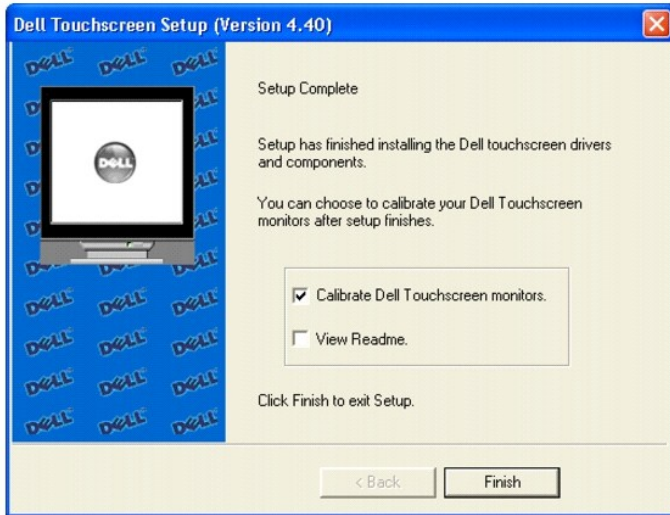
9. To calibrate the monitor, select **Calibrate Dell Touch Screen monitors**, click **Finish**.

   You may choose to run the calibrate program at a later time from the Dell Touch Screen Properties.

Multiple Monitors with Serial controllers

Follow the general procedure for Single monitor, serial controller installation above, auto detecting or selecting all the serial ports that you will use. When the **Setup Complete** screen appears, you may choose to run calibration (the Dell Video Alignment program, EloVA) immediately or wait until later. If you choose not to run this program now, you can run it from the Dell Control Panel application. When EloVA runs for the first time, it will attempt to calibrate all controllers and/or serial ports that were installed. Press the Esc key on the keyboard to terminate or skip calibration for any monitor, or allow the program to time out (as indicated by the progress bar reaching maximum).

Multiple Monitors with USB controllers

1. Follow the procedure for Single monitor, USB controller installation above.

2. The driver files will install. When the Setup Complete screen appears, you may choose to run calibration (the Video Alignment program, EloVA) immediately or wait until later. If you choose not to run this program now, you can run it from the Dell Properties Control Panel. When EloVA runs for the first time, it will attempt to calibrate all controllers and/or serial ports that were installed. Press the Esc key on the keyboard to terminate or skip calibration for any monitor, or allow the program to time out (as indicated by the progress bar reaching maximum). The program will continue until all controllers and/or ports have been calibrated.

Multiple Monitors with Serial or USB controllers

1. On the Dell CD, browse to the DellTouchDriver directory, then double-click the DellXpu.exe file.

   Dell Setup launches.

2. Click Yes.

   Click Unzip to extract driver files.

3. Specify the language for Xpu driver package.

4. Select both the **Install Serial Touch Screen Drivers** and **Install USB Touch Screen Drivers** boxes.

5. Review and accept the License Agreement.

The program will appear to proceed as a single/multiple serial controller installation but USB files will also install. The driver files will install. When the Setup Complete screen appears, you may choose to run calibration (the Video Alignment program, EloVA) immediately or wait until later. If you choose not to run this program now, you can run it from the Dell Control Panel application. When EloVA runs for the first time, it will attempt to calibrate all controllers and/or serial ports that were installed. Press the Esc key on the keyboard to terminate or skip calibration for any monitor, or allow the program to time out (as indicated by the progress bar reaching maximum). The program will continue until all controllers and/or ports have been calibrated.

Performing a Silent Install

If you have to perform several installations, you may want to take advantage of the Touch Screen software silent install facility. You can run a silent install from diskettes, a CD, hard drive, or network drive. To begin, you must create a silent install script that contains the recorded install instructions.
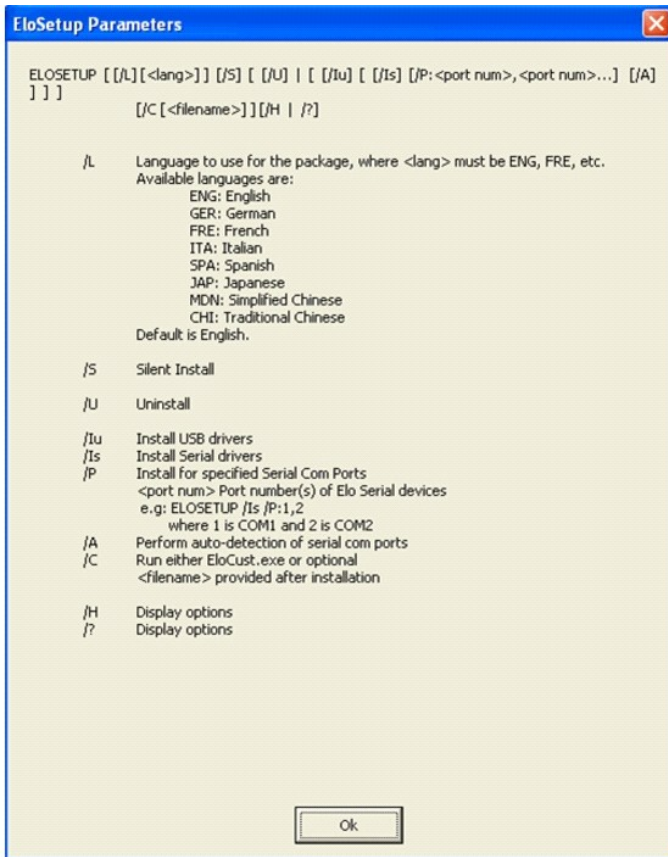
- l To Silent install for USB controllers use:

  EloSetup /iu /s

- l To Silent install for a Serial controller on COM1 use

  EloSetup /is /P:1 /s

To view all the options available for this installation method, run EloSetup as EloSetup /h.
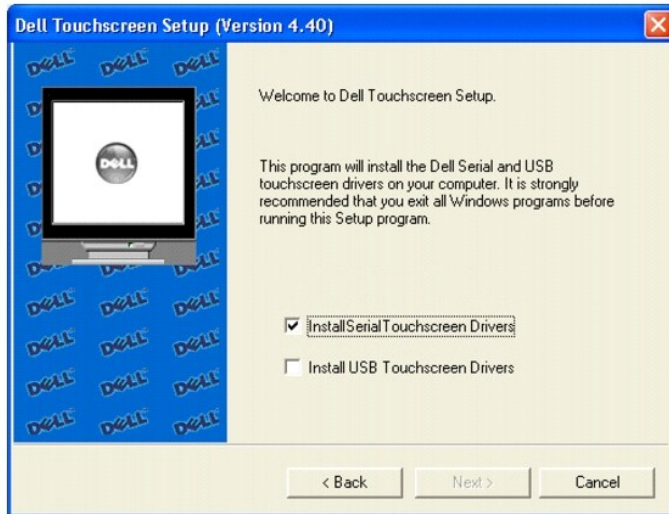

Adding Controllers

You can add additional controllers after installation from the Windows Add or Remove Programs dialog.

Adding Serial Controllers

1. Click **Start**" **Control Panel** "**Add or Remove Programs**.

2. Locate the Dell entry, then click **Change**.

   The Dell Touchscreen Setup dialog appears.

3. Select **Install Serial Touchscreen Drivers**, click **Next**.

Adding USB Controllers

If there are Dell USB devices already installed, plug the USB cable from the touchmonitor into the computer and run EloVA to calibrate the touchmonitors.

If there are no Dell USB devices attached to the system, click on the Change option from the Add or Remove programs in the Control Panel, Dell entry.
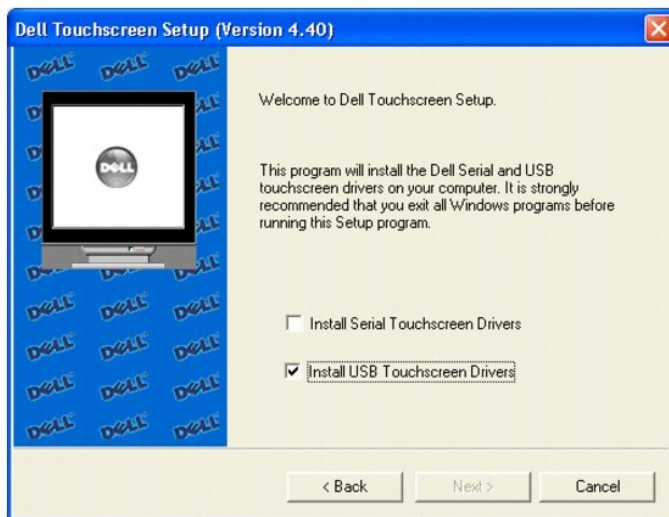
Uninstalling Touch Screen Software

The Uninstall program removes all touch screen software components from your computer. These components include touch screen software files, directories, program folders, and folder items. The Uninstall program also removes all touch screen software entries from the system registry files.

1. Make sure the touch screen software and Windows control panels are closed.

2. Click **Start** " **Control Panel** "**Add or Remove Programs**.

3. Locate the Dell entry, then click **Remove**.

4. Click **Yes** to confirm removal.

   You may see the following message when the Uninstall is complete: `Some elements could not be removed. You should manually remove items related to the application.` This is normal, as several files remain in use until you restart the computer.

5. Click **Details** to see the remaining files.

📝 **NOTE:** If you have a serial controller, you must restart your computer once the Uninstall is complete. The touch screen driver remains in use until you restart the computer. USB controllers do not require a restart, as the driver is uninstalled when you disconnect the last touch screen.

Disabling Touch Functionality

Touch functionality may be quickly and easily disabled using the Tool Tray icon. If the Dell icon is not in the Tool Tray (lower right corner of the display), see the section on enabling the Tool Tray icon below.

1. Click the Dell icon in the Tool Tray (lower right corner of the display) .

   The Dell Touch Screen Properties dialog appears.

2. Click **Disable Touch**.

3. Touch functionality will be disabled. To re-enable touch functionality, click **Enable Touch**.

Using the Touch Screen Control Panel

To open the Touch Screen software control panel:

ι Double-click the Touch Screen software icon on the desktop.
ι Select **Start** "**Settings**" **Control Panel** and double-click the Dell Touch Screen icon.
ι Right-click the Dell icon in the Windows system tray and choose **Dell Touch screen Properties**.

General

You can use the General tab on the Dell Touch Screen Properties dialog to align or calibrate your touchmonitor to ensure that the mouse cursor appears at the position of touch.

Dell uses a three-point calibration sequence that accepts touchscreens with any orientation of the X or Y axis, in landscape or portrait mode.

You should calibrate the touch screen in the following cases:

ι When you change a particular video resolution (for example 640x480) or video mode of your monitor for the first time.
ι When you change the size of the video image by adjusting the horizontal and vertical controls on your monitor.
ι When the cursor does not follow the movement of your finger, or does not reach the edges of the touch screen.

To calibrate the touch screen:

1. Right-click the Dell icon in the Windows system tray and select **Align**.

   The Dell Touch screen Properties dialog appears.
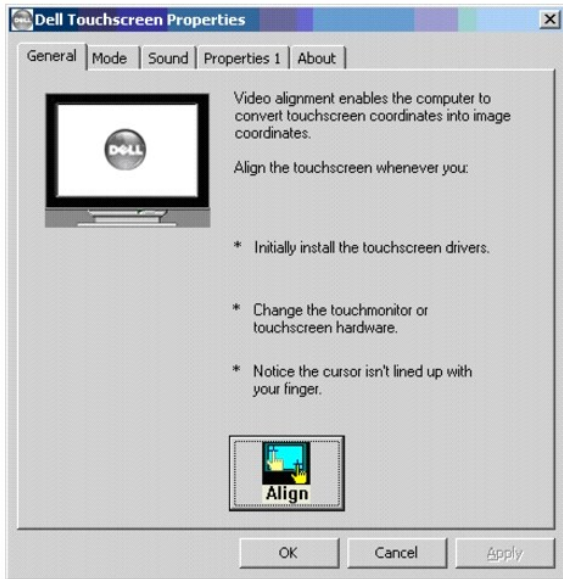
2. Select the **General** Tab, then click **Align**.

3. A target appears on the screen. Touch the calibration target firmly and precisely with your fingertip. Be careful to keep your other fingers away from the touch screen as you touch the target.


📝 **NOTE:** If you press Escape or do not touch the touch screen within 20 seconds, the system automatically cancels the calibration process with no change to the current settings.

4. Repeat these instructions for additional calibration targets.

Recalibrate the touch screen if any of the following tests fail.

l Touch random points on the screen. The cursor should be located underneath your finger or pen when you touch the screen.

l Drag your finger across the screen and check that the cursor follows your movements.

l Touch each corner and along the edges of the screen. Verify that the cursor reaches the full image area of the screen. Ensure that you can touch and activate all icons and menus across the entire screen.

l If you need to recalibrate the screen, make sure to touch the targets carefully. It is possible that one of your touches did not register properly or you accidentally touched the screen in the wrong place during calibration. For example, if you touch beyond the targets or into the non-image area, you will distort the touch screen calibration.

Mode

You can use the **Mode** tab to customize the response of your touch screen by defining the touch actions that equate to a mouse click, double-click, and drag. You must click **Apply** to activate changes made on the **Mode** tab.

.
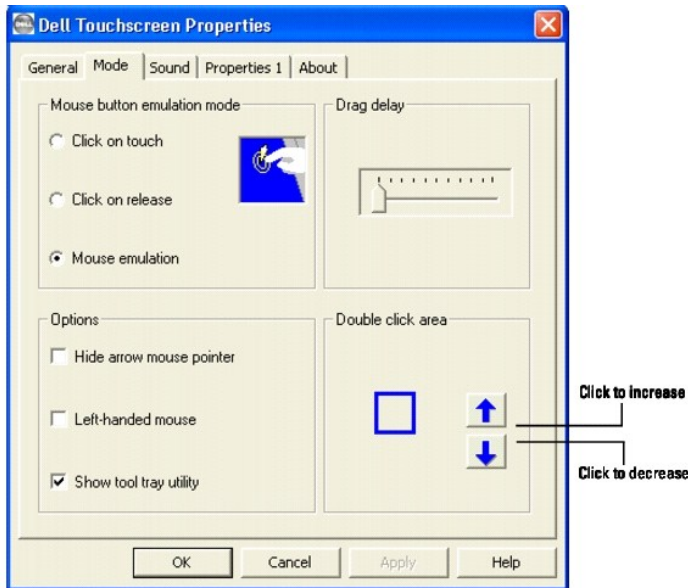
Mouse button emulation mode

Place the right-click tool on your desktop enabling you to utilize right-click functionality using the touch screen.

Click on Touch

Click on Touch sends a mouse down/up message at the point of touch on the touch screen. You must remove your finger from the touch screen for a new touch at any location to be recognized. The cursor or selected objects cannot be dragged on the screen in this mode.

Click on Release

Click on Release sends at the time of release (untouch) a mouse down/up message at the point that the screen was last touched. Dragging across objects on the screen will not highlight or select them unless untouch occurs when the touch is over the object.

Mouse Emulation (Drag and Double-Click)

- l Sends a mouse down message at the point of contact.
- l Selects an object if it was at the initial point of contact.
- l Drags a selected object on the screen.
- l Response to dragging is set by the Drag delay slider bar.
- l Sends a mouse up message at the point of untouch.
- l Double-clicks on an object when the screen is touched twice in rapid succession at the same location.
- l The speed to achieve double-click is identical to the speed of a successful double-click with the mouse.
- l Double-click speed is set from the Mouse Properties control panel (Mouse Properties"Buttons"Double-click speed).
- l Double-click area graphically sets the dimensions of the location around each clickable icon or object on the screen which will be recognized by Windows as a double-click. The size of the wire-frame square displayed in the Double-click area tab is the actual size of double-click area accepted by Windows. The square is increased or decreased in size by touching the appropriate arrows adjacent to the square. Note that the double-click box size is independent of screen resolution and must be defined for each user.

Options

Options allow various features of the desktop related to the touch screen to be configured. You must click Apply to activate these features.

- l Hide arrow mouse pointer turns off the standard mouse cursor.
- l Left-handed mouse interchanges the standard two-button mouse button assignments.

l   Show tool tray utility activates the Tool Tray utility in the Windows Task Bar. See Tool Tray for a complete description of this feature

Sound

The Sound tab sends a single-frequency tone or "Beep" to the system speaker each time a valid touch occurs.
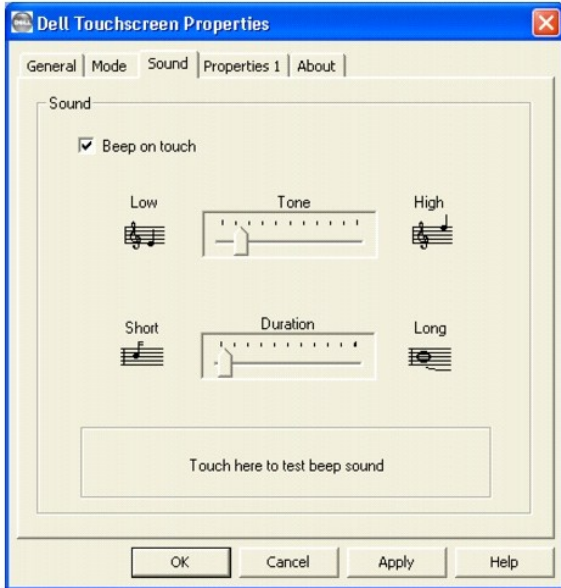

The beep is enabled by default when the driver is installed. It may be turned off by unchecking the Beep on touch box in this tab.

The frequency (Tone) and the Duration of the beep can be adjusted by moving the appropriate slider in this tab with the touch screen or mouse, or by using the keyboard arrow keys.

You must click Apply to activate the changes made on the Sound tab.

Properties

A Properties page is created for each touch screen controller installed by EloSetup and for each serial port reserved for a controller, even if that controller is not present. A number is assigned to each Properties page that is related to the order in which controllers or ports were detected or enumerated. Each Properties page contains information extracted from the touch screen controller and the system about the monitor, touch screen, controller, and internal driver.
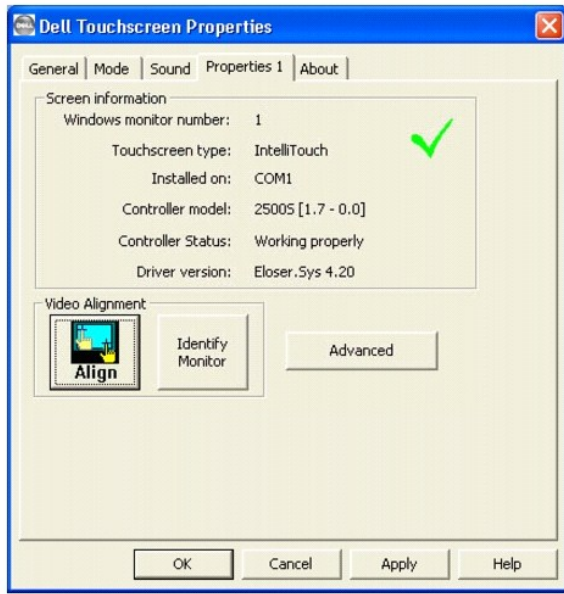
Screen Information

- Windows Monitor Number lists the monitor that corresponds to the "Windows Monitor" from the Windows Display Properties control panel.

- Touch screen Type: IntelliTouch.

- Installed On indicates USB or lists the Windows COM port that a serial touch screen is installed on.

- Controller Model lists the marketing model number of the controller attached. It also lists the revision of the firmware loaded in the controller.

- Controller Status indicates either "Working properly" or reflects any errors reported from the controller.

- Driver Version lists the version number of the internal driver being used for serial and USB devices as appropriate.

- The Video Alignment and Advanced buttons appears for touchscreens that have been calibrated.

- The Identify Monitor button displays the Dell logo on the monitor associated with this Properties page for about one second each time this button is touched.

- The EloVA icon will launch the video alignment program only for the monitor associated with the current Properties page. Running EloVA from the Properties page avoids the need to align all monitors in a multiple monitor application when only a single monitor alignment is desired.

- If a serial port is reserved for a touch screen controller that is not actually installed, the only information contained in the Screen information section of the associated Properties page is the number of the Windows COM port. No Screen configuration icons are displayed.

About

The About tab provides the version of the Control Panel (which is linked to the driver version) and also provides links to the Dell website, the readme included with the driver, and the user manual.

Advanced Settings

The Advanced dialog contains additional Touch settings. The **Touch** tab includes the following options:

- A toggle for Disabling/Enabling touch.

- An option to display the Right Mouse button tool.

- Settings for defining the behavior of right-click functionality.

- A button for activating the Edge Acceleration Tool.
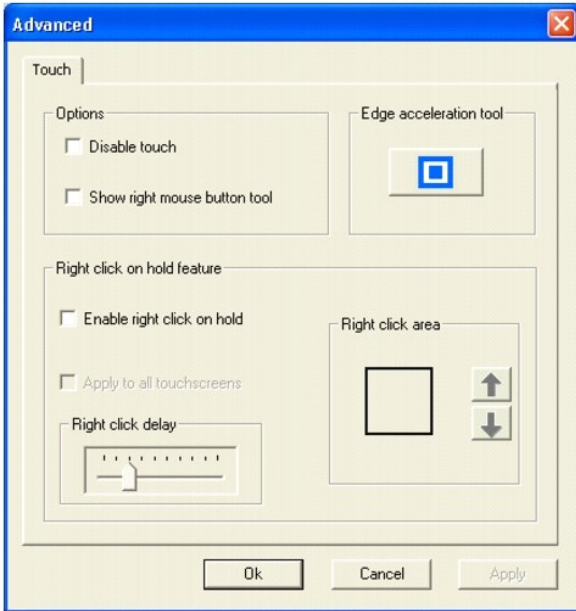
Disable/Enable touch

Disable Touch stops touch information from reaching Windows for this touch screen. This feature may also be activated from the Tool Tray utility. Disabling touch has no effect on the operation of the standard mouse.

Show right mouse button tool

Show right mouse button tool launches this feature for this monitor. See Dell Right Mouse Button Tool (RMBT) for a complete description of this feature.

Edge acceleration tool

Edge Acceleration Tool launches this utility for this monitor. See Edge Acceleration Tool (EAT) for a complete description of this feature.

Right-click on Hold Feature

Right click on hold feature enables you to create right-clicks on the touch screen without running the Right Mouse Button Tool. If you touch the screen and hold, a right-click is generated on the screen, if you remain within the right-click area and after the right-click delay time-out has occured. The right-click delay allows you to perform other touch screen operations normally.

📝 **NOTE:** Right click on hold is enabled only in "Mouse emulation" touch mode.

When the Right click on hold feature is turned on, the delay value is set to a minimum of 25 milliseconds.

  l   To enable this feature, select **Enable right click on hold**.

  l   To enable this feature for all touchscreens, select the **Apply to all touchscreens** check box.

Right click delay defines the right click delay value in milliseconds. The right click delay allows the users to perform other touch screen operations normally.

Right click Area defines the area size that generates a right click. This feature allows you to touch within a larger area.

Dell Right Mouse Button Tool (RMBT)

Right Mouse Button tool allows a Windows right mouse button simulation on the touch screen.

A representation of a typical two-button mouse is displayed in a small window on the desktop, when this application is run. The initial presentation of the RMBT shows the left button shaded, indicating that the left button is active. Any touch on the desktop or an application will produce a left button click consistent with the Button settings in the Control Panel.

A touch in the RMBT will change the shading to show the right mouse button active. Now any touch on this monitor on which RMBT is running will produce a right button click.

Typically, a right button action will activate a new dialog box for some function similar to mouse right button click. When that dialog box is touched, or any other touch on the touch monitor is made, this touch will be a left button event. Simultaneously, the mouse button shading in the RMBT will toggle back to the left button.

After activating the right-button state, touch the RMBT again to display the menu that allows you to:

Launch the Dell Touch screen Properties dialog, close the right button utility.

You can drag the RMBT to any location on the desktop by touching it and holding the touch until the crossed arrows appear.

- The RMBT may also be dragged with the standard mouse.
- The RMBT cannot be resized.
- The RMBT can be run for every touchmonitor from the Dell Control Panel " Properties tab.

Tool Tray

The Tool Tray application offers a convenient way to access commonly used functions of the driver from the operating system desktop. For the Tool Tray icon to appear in the Windows system tray, you enabled it from the Mode tab in the Control Panel.

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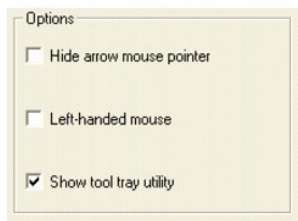
You can launch the Tool Tray application with a single left or righ- click.
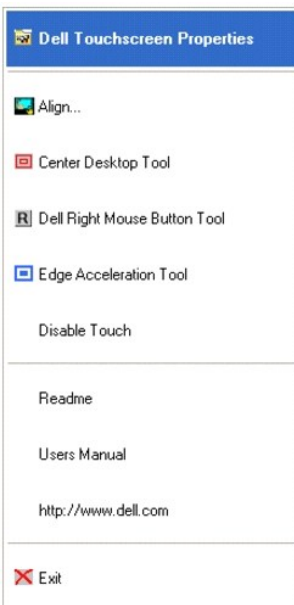
The Tool Tray application provides the following features:

- Access to Dell Touch screen Properties.
- Align - Launches EloVA, the Dell Video Alignment program.
- Center Desktop Tool - Launches Center Desktop Tool.
- Dell Right Mouse Button Tool (RMBT) - Launches Right Mouse Button Tool for all touch monitors that have been calibrated.
- Edge Acceleration Tool - Launches Edge Acceleration tool.
- Disable/Enable Touch - When the driver is loaded and running, clicking this segment of the Tool Tray menu will disable the driver, stopping all touch reports from being sent from the driver to the mouse handler (MouClass)

When disabled through the Tool Tray, touches made on the touch screen are not buffered by the driver, and will not be sent from the driver to MouClass after the touch screen is re-enabled.

After the touch screen has been disabled, the state of this segment of the Tool Tray menu changes from "Disable" to "Enable." Since the touch screen is now disabled, it can only be enabled by using the mouse or keyboard. Clicking "Enable" in the Tool Tray will restore touch screen operation.

NOTE: It is also possible to re-enable the touch screen from the Control Panel after touch has been disabled from the Tool Tray. Open the Control Panel with mouse or keyboard, uncheck the "Disable Touch" box in the Mode"Options tab, click "Apply" and touch is restored.

- Readme - Launches Readme instructions.

- User Manual - Quick link to this User Manual.

- http://www.dell.com - A quick link to Dell's website

- Exit - Clicking this button exits the Tool Tray application and also removes it from the Windows Taskbar. The Tool Tray application may also be removed by clearing the **Show tool tray utility** check box, then clicking **Apply**.

Center Desktop Tool

Presents a full screen image for the selected monitor to allow proper adjustment of the video prior to running the EloVA video alignment program

- Configurable parameters are

  - Border width, in pixels

  - Which monitor to adjust in a multiple monitor configuration

- Can be launched from the Tool Tray (for single monitor) or command line (for multiple monitors)

- Configuration syntax menu is available by running eloalmon /h. Only one monitor may be adjusted for each execution of the program.

- Program terminates when green "check" mark is touched or clicked with the mouse, or from the keyboard by pressing Esc, Enter or Space. See graphic below.
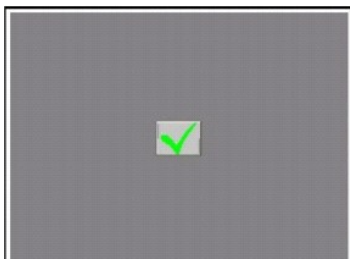

The center desktop tool solves the common problem of adjusting the size of the video image in video alignment programs.

Edge Acceleration Tool (EAT)

Edge Acceleration tool can be used to configure cursor acceleration towards the edge of the touch screen. Edge Acceleration is a special feature provided to allow touches towards the edges.

EAT (i.e. EAT.exe) can be launched from Program Files" Dell Xpu folder.

Presents a full screen image with the edge acceleration rectangle bounds and a Cursor Acceleration Configuration dialog, displaying the configuration parameters for Edge Acceleration.
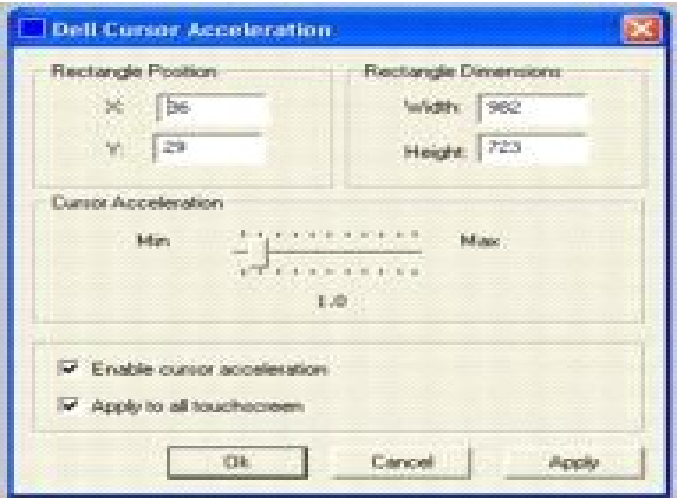
Configurable parameters are:

- Cursor Acceleration scale. This scale can be set from a value of 0-10 where, 1 corresponds to no acceleration.

- Edge acceleration rectangle bounds dimensions.

- Edge acceleration rectangle bounds position.

- Enable cursor acceleration.

- Apply to all touchscreens.

These parameters can be configured using the mouse to resize or move the bounds rectangle, or by entering the values directly in the dialog box. You must click Apply to activate the changes made in this dialog.

This applies to all touchmonitors unless run with appropriate command line options. To view the options available, run EloAccel using EloAccel /h.

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