

Mac Edition Getting Started Guide

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The User's Guide

Your ATI Graphics Accelerator comes complete with a User's Guide in **Portable Document Format** (PDF). The User's Guide describes in detail the features and functions of your ATI Graphics Accelerator and the associated software. The User's Guide is installed with the software and can also be found on the installation CD-ROM. For more information see *User's Guide* on page 10.

Disclaimer

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ATI Graphics Accelerator: Getting Started Guide

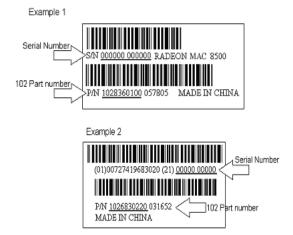


Before Installing the ATI Graphics Accelerator

ATI Technologies Inc. (ATI) provides customer service to registered users. To ensure you receive all Service and Warranty options available to you, your product must be registered online at:

www.ati.com/online/registration

The 102 part number (p/n) and the serial number (s/n) printed on the video card is required for registration.



Write these numbers down before installing your new ATI product.

Enter your serial number (s/n) here:	
Enter your 102 part number (p/n) here:	

The ATI Graphics Accelerator fits into connectors called expansion slots, inside your Apple[®] Macintosh computer.

Your Power Macintosh computer has one or more expansion slots designed to accept Peripheral Component Interconnect (PCI) cards and/or one Accelerated Graphics Port (AGP) card.



Turn off the power to your system and discharge your body's static electric charge by touching a grounded surface—for example, the metal surface of the power supply—before performing any hardware procedure.

The manufacturer assumes no liability for any damage, caused directly or indirectly, by improper installation of any components by unauthorized service personnel. If you do not feel comfortable performing the installation, consult a qualified computer technician.

Damage to system components, the accelerator card, and injury to yourself may result if power is applied during installation.



The following procedure details the installation of a card in a typical Apple[®] G4-based computer. If your computer does not match this configuration, please refer to the expansion card installation instructions that came with your computer.



For Mac OS 9.x users only:

- If your computer stops responding (hangs) after installing the ATI Graphics Accelerator, you may have an incompatible graphics accelerator extension. This can occur when Mac OS software or other ATI graphics accelerators are installed.
- Restart your computer and hold down the SHIFT key during startup. This disables all extensions from loading. After disabling extensions, you can update the graphics accelerator extension by installing the software included with your card. For more information about installing the software, see "Installing The Software" on page 9.

Installing your ATI Graphics Accelerator card



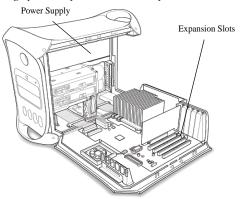
To install a RADEON 9800 PRO MAC EDITION see "Installing a RADEON 9800 PRO Mac Edition" on page 6.

- 1. Turn off your computer, and disconnect the monitor cable.
- 2. Open your computer. If necessary, consult your computer system manual for instructions.



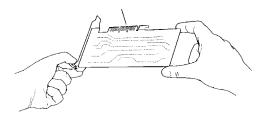
- 3. Choose the PCI or the AGP expansion slot you wish to use.
- 4. Touch the metal part of the power supply case.

 Touching the grounded portion of the power supply case will discharge your body's static electricity.

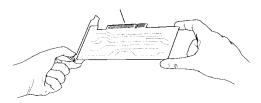


5. Align the connector on the card with the selected expansion slot, and press firmly until fully seated.

AGP Connector



PCI Connector



Do not force the card. It should fit snugly into the expansion slot.

- 6. Close the computer case.
- 7. Connect the monitor cable to the card.

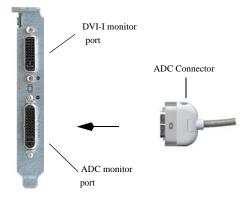
If you have a VGA monitor, connect it to the VGA monitor port. If you have a TV, connect it to the TV Out port. If you have a digital flat panel, connect it to the DVI-I port.



Some ATI RADEON Graphics Accelerator cards have an ADC (Apple® Display Connector) which allows direct connection to your Apple® monitor. These graphic accelerator cards typically do not support TV Out.

To connect an Apple® monitor to some ATI Graphics Accelerators, you will need an Apple® adapter. Simply connect your Apple® monitor connector to the Apple® adapter, and then plug the Apple® adapter into the VGA monitor port

ATI RADEON Graphics Accelerator with ADC



Installation of your ATI Graphics Accelerator is now complete, and you are ready to install the software. See "Installing The Software" on page 9.



Powered Apple® monitors using the ADC (Apple® Display Connector) may need to be supported using a third party powered adapter.

Installing a RADEON 9800 PRO Mac Edition



The RADEON 9800 PRO Mac Edition requires connection to your Mac's internal power supply for operation. Consult your system documentation to ensure your system has an adequate power supply. In order to maintain enough resources to support the widest range of other add-in components ATI recommends a 300 watt power supply or greater to ensure normal system operation.

Connecting to the Hard Drive power connector

For users living in countries that use the PAL Television standard see "NTSC/PAL Support" on page 8.

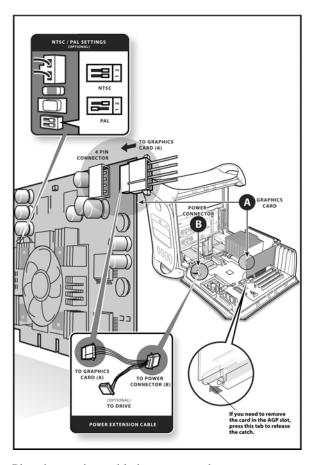
Use the supplied Power Extension Cable to connect the RADEON 9800 PRO Mac Edition to the computer's Hard Drive power connector.

- 1. Locate the AGP slot, if necessary, removing the metal cover:
 - Align your ATI Graphics Accelerator card with the AGP slot.
 - Press it in firmly until the card is fully seated.
- 2. Replace the screw to fasten the card in place.
- 3. Connect **A** of the Power Extension Cable to the RADEON 9800 PRO Mac Edition power connector as shown. (The cable may already be connected to the graphics card.)
- 4. Connect **B** to the power supply connector.

Note: If there is no spare power connector:

Remove the power cable from the Hard Drive power connector and complete steps 3 and 4 above.

Connect optional connector to the Hard Drive power connector. (See inset diagram below.)



- 5. Plug the monitor cable into your card.
- 6. Turn on the computer and monitor.



A graphic image of a video card with a



flashing red power connector will appear on your display and the computer will not start if the RADEON 9800 PRO Mac Edition is not correctly connected to the power supply.

NTSC/PAL Support

The RADEON 9800 Pro Mac Edition provides both NTSC and PAL support. NTSC is the TV standard used in North America. PAL is the TV standard for most of Europe.



The default setting for the RADEON 9800 PRO Mac Edition is NTSC. If you live in North America there is no need to change this setting unless you intend to use PAL standard equipment (for example, PAL Camcorder/PAL VCR) and do not wish to change this setting in software.

You can also change the PAL/NTSC setting through software using the ATI Displays control panel **or Mac OS X's Displays preference panel**. For more information see the User Guide or the online Help for ATI Displays.

To change the setting to PAL

- Remove the RADEON 9800 PRO Mac Edition from your computer.
- 2. Locate the orange switch near the fan (see illustration on page 7).
- 3. Use a sharp pencil to move slider switch number 1 as shown in the illustration.

Re-install the graphics accelerator card into your computer.



You can also change your PAL/NTSC settings through software using the ATI Displays control panel. For more information see the User Guide or the online Help for ATI Displays.

Installing The Software

- Insert the ATI Installation CD.
- Double-click on the ATI Graphics Accelerator Installer icon.

The ATI splash and legal notice screens appear.



OS X users may be prompted for the Administrator's password.

3. Follow the instructions that appear on the screen.

Upon completion of the installation process, a file containing a list of installed files and their location on your hard disk is created allowing you to locate any file installed during the installation process.

4. When you see a message that the installation was successful, click Restart.

or

To perform further installations, click OK.

You need to manually restart your computer to complete the installation of the ATI Graphics Accelerator software.

About ATI Software

The ATI Graphics Accelerator requires several additional components be added to your System folder. The ATI Graphics Accelerator Installer application does this for you, installing the following components:



ATI Displays Control Panel

The ATI Displays control panel lets you configure your card and access software and hardware features. These features are described in the User's Guide that came with your ATI Graphics Accelerator card.



ATI Multimedia Components

ATI's Multimedia Components are placed in the Extensions folder, located within the System Folder in Mac OS 9.x and in the System/Library/Extensions folder in Mac OS X. They enable all of the advanced features of your card, including 3D and 2D acceleration where applicable.



ATI Help

All online help for RADEON based products is available in ATI Help. For more information about using the HELP system see the User's Guide that came with your ATI Graphics Accelerator card.

User's Guide

Your ATI Graphics Accelerator comes with a User's Guide that provides indepth information of the video card's many features and functions. The **User's Guide** provides reference, specification, disclaimer, legal, and compliance information that is not contained in this Getting Started guide.

In Mac OS X the User's Guide can be found in the **ATI Utilities** folder. Mac OS 9 users will find the User's Guide in the **ATI Manuals** folder.

To access the User's Guide in Mac OS X:

- Click on Finder
- Click the **Applications** folder
- Click the Utilities folder
- Click the ATI Utilities folder
- Double-click User's Guide

To access the User's Guide in Mac OS 9:

- Click on Hard Drive
- Click the **Documents** folder
- Click the ATI Manuals folder
- Double-click User's Guide

Troubleshooting Tips

If you have a general question, or encounter problems with your card, please review this information completely. Further troubleshooting information can be found on the ATI Technical Support website at www.ati.com.

Use *Apple*[®] *System Profiler* found in the Utilities folder, to generate a report outlining your system configuration.

Solutions to Common Problems

Why can't I get a resolution higher than 800x600?

If the monitor is connected to the VGA monitor port on your ATI Graphics Accelerator...

go to the Display control panel found in System
Preferences in Mac OS X or Monitors control panel in OS
 9. This control panel allows you to change to a higher
resolution supported by your monitor.

I have a monitor with three BNC connectors. Why won't it work with my ATI Graphics Accelerator?

• Monitors that only have three BNC connectors require a synchronization ("sync") signal to be sent down the green line. This is called Sync-on-Green (SOG). ATI Graphics Accelerators do not output a SOG signal. Adapters are available for your Mac OS computer to convert the separate sync signal from the ATI card to a SOG signal for the monitor. Check with your local Apple[®] Authorized Dealer for availability of SOG adapters.

I have a monitor with five BNC connectors. Why won't it work with my ATI Graphics Accelerator?

- For a cable with five BNC connectors, ensure that they are all connected to the monitor. If only three of the cables are connected (i.e., R, G, and B), the monitor is expecting a Sync-on-Green (SOG) signal.
- Some monitors may have a switch to set the monitor to either SOG or separate sync. If the switch is set to SOG, the monitor will show a scrambled display. Setting the switch to separate/composite sync may resolve the problem.
- A number of BNC cables, even though they are designed for Mac OS computers, do not supply the sense code needed by the graphics card. Using an adapter that sets the appropriate sense code should solve the problem.



BNC cables do not pass DDC information to the ATI Graphics Accelerator.

Does the ATI Graphics Accelerator work in all Power Macintosh computers?

- No, the ATI Graphics Accelerator only works in PCI or AGP based Power Macintosh computers with a PCI (33MHz or 66MHz) or AGP expansion slot. The minimum system requirements for your specific ATI Graphics Accelerator are listed in the "What you'll need" section of the User's Guide.
- Due to the unique design of the Apple[®] G4 Cube, ATI Graphics Accelerator will not fit into these systems.

Warranty Information

Product Warranty Registration

To receive CustomerCare you must register your product with ATI.

Online Product Warranty Registration is available at:

http://www.ati.com/online/registration

CustomerCare

For detailed instructions on how to use your ATI product, refer to the Online User's Guide included on your ATI Installation CD-ROM.

If you require further assistance with your product, the following options are available:

Online:

For product information, video drivers, Frequently Asked Questions and Email support visit:

http://www.ati.com and select CustomerCare for Built By ATI products.

Telephone:

Available Monday to Friday, 9:00 AM - 7:00 PM EST.

*905-882-2626

*Access to Telephone Support is available to registered users at no additional cost for the first 30 days from the date of purchase (long distance charges may apply). For complete details please visit:

http://www.ati.com/online/customercare

Mail:

ATI TECHNOLOGIES INC.

Attention: Customer Service 1 Commerce Valley Drive East Markham, Ontario Canada L3T 7X6

Hardware Warranty Service Statement

Should the product, in ATI's opinion, malfunction within the warranty period, ATI will at its discretion repair or replace the product upon receipt with an equivalent. Any replaced parts become the property of ATI. This warranty does not apply to the software component of a product or a product which has been damaged due to accident, misuse, abuse, improper installation, usage not in accordance with product specifications and instructions, natural or personal disaster, or unauthorized alterations, repairs, or modifications.

For a detailed description of the ATI Hardware Warranty Service Statement visit:

http://www.ati.com/online/warranty/statement

Warranty Service

For warranty service instructions visit:

http://www.ati.com/online/warranty

or contact one of our Customer Service Representatives using one of the aforementioned means.

- Before shipping any unit for repair, obtain an RMA number for warranty service.
- When shipping your product, pack it securely, show the RMA and serial number of the product on the outside, and ship prepaid and insured.
- ATI will not be held liable for damage or loss to the product in shipment.

Limitations

- This warranty is valid only if the online Product Warranty Registration form at:
 - http://www.ati.com/online/registration
 - is successfully submitted within 30 days of purchase of said product.
- All warranties for this product, expressed or implied, will expire three (3) years from date of original purchase.

^{*} All accompanying cables and accessories are warranted for 90 days.

- No warranties for this product, expressed or implied, shall extend to any person who purchases the product in a used condition.
- The liability of ATI in respect of any defective product will be limited to the repair or replacement of such product. ATI may use new or equivalent-to-new replacement parts. Defective product will be sent in for repair or replacement only.

ATI makes no other representations or warranties as to fitness for a particular purpose, merchantability or otherwise in respect of the product. No other representations, warranties or conditions, shall be implied by statute or otherwise.

In no event shall ATI be responsible or liable for any damages, including but not limited to the loss of revenue or profit, arising:

- from the use of the product,
- from the loss of use of the product,
- as a result of any event, circumstance, action or abuse beyond the control of ATI; whether such damages be direct, indirect, consequential, special or otherwise and whether such damages are incurred by the person to whom this warranty extends or a third party.

Compliance Information

FCC Compliance Information

The RADEON family of cards complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- · This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Re-orient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
 - The use of shielded cables for connection of the monitor to the graphics card is required to ensure compliance with FCC regulations.
 - Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Industry Canada Compliance Statement

ICES-003 This Class B digital apparatus complies with Canadian ICES=003.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

For further compliance information:

ATI Research Inc. 62 Forest Street. Marlborough, MA 01752 USA 508-303-3900

CE Compliance Information

EMC Directive 89/336/EEC and Amendment 92/31/EEC, Class B Digital Device

EN 50081-1, Generic Emissions Standard for Residential, Commercial and Light Industrial Products

(EN 55022/CISPR 22, Limits and Methods of Measurement of Radio Interference Characteristics Information Technology Equipment) Warning: This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. EN 50082-1. Generic Immunity Standard for Residential. Commercial and

 ${\rm EN}$ 50082-1, Generic Immunity Standard for Residential, Commercial and Light Industrial Products

(IEC 801-2, IEC 801-3, IEC 801-4)

Directive EMC 89/336/CEE et amendement 92/31/CEE, dispositif numérique de Classe B

EN 50081-1, Norme sur les émissions génériques pour les produits domestiques, commerciaux et industriels légers

(EN 55022/CISPR 22, Limites et méthodes de mesure des caractéristiques d'interférences radiophoniques, Matériel des technologies de l'information) Mise en garde: ceci est un produit de Classe B. Il risque produire des interférences radiophoniques dans un environnement domestique auquel cas l'utilisateur peut se voir demandé de prendre des mesures adéquates.

EN 50082-1, Norme sur l'immunité générique pour produits domestiques, commerciaux et industriels légers.

(CEI 801-2, CEI 801-3, CEI 801-4)

EMC Richtlinie 89/336/EEC und Änderung 92/31/EEC, Digitales Gerät der Klasse B

EN 50081-1, Allgemeiner Emissions-Standard für Haushalt- und kommerzielle Produkte sowie Erzeugnisse der Leichtindustrie

(EN 55022/CISPR 22, Beschränkungen und Verfahren der Messung von informationstechnischen Ausrüstungen mit Funkstörmerkmalen)

Warnung: Dies ist ein Erzeugnis der Klasse B. Dieses Erzeugnis kann Funkstörungen im Wohnbereich verursachen; in diesem Fall können entsprechende Maßnahmen seitens des Benutzers erforderlich sein.

EN 50082-1. Allgemeiner Unempfindlichkeits-Standard für Haushalt- und kommerzielle Produkte sowie Erzeugnisse der Leichtindustrie (IEC 801-2, IEC 801-3, IEC 801-4)