

**READ  
ME  
FIRST!**

## Windows® Installation Guide

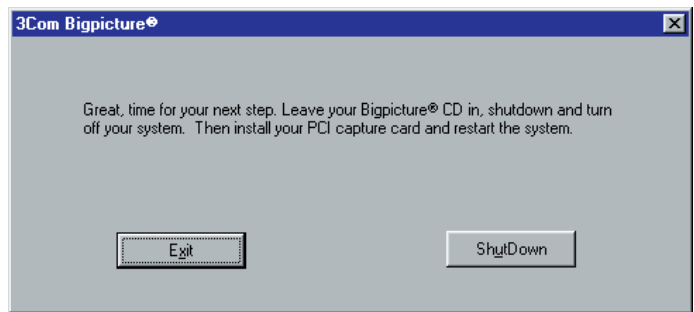
part number 1.024.1928-00

### Congratulations on your purchase of the #1 selling PCI video solution!

- 1** To ensure the easiest installation, run the Bigpicture pre-install check by inserting the Bigpicture CD-ROM into your CD-ROM drive.

The pre-install check should run automatically once the CD-ROM is inserted into your CD-ROM drive. If the check does not run, click **Start**, click **Run**, and type [x]:\Begin.exe, where "[x]" is the letter of your CD-ROM drive (usually "D"). Then press **ENTER**.

Once the pre-install check is finished, you will see the following screen:



Leave the Bigpicture CD-ROM in your CD-ROM drive. You will need it for software installation in step 7. Click **ShutDown**. Windows will close and your computer will shut down.

Write your serial number here:

The serial number is located on the white bar code sticker on the video capture card and on the Bigpicture Video box.
- 2** Once your computer has completely shut down, turn off and unplug your computer and all external devices attached to the computer.

Refer to your computer manual or contact your computer manufacturer for instructions on how to remove your computer cover safely.

**CAUTION:** To avoid risk of electric shock, make sure your computer and all external devices attached to the computer are turned off and unplugged from electrical outlets.

- 8** Test the installation.

Start the Bigpicture application launcher by clicking the **Bigpicture Launcher** icon in the Windows **Start** menu. Click **Video Gear**. Click **PictureWorks Live!** When PictureWorks Live! starts, you should see a picture of what the camera is pointing at. This indicates successful installation of your Bigpicture kit! **NOTE:** If you do not see video in the PictureWorks Live! screen, turn to the "Troubleshooting" section on the back of this *Installation Guide* for more information on solving your problem.

- 7** Install the software.

The green LED on the camera should be lighted. Turn on your computer. When Windows restarts, it will detect the capture card and install its drivers. When Windows has finished installing the drivers, it will begin the software installation automatically. Follow the on-screen instructions to complete the software installation. The following applications will be installed on your system if you run the typical installation (recommended):

Microsoft® NetMeeting®, PictureWorks Live!®, PictureWorks NetCard®, White Pine® CU-SeeMe®, RealNetworks® RealPlayer® Plus, and the Bigpicture launcher. Software installation lasts approximately 20 minutes.

- 6** Replace the computer cover. Plug the power cord into an electrical outlet. Reconnect and turn on all external devices disconnected in step 2.

- 5** Attach your camera to the capture card.

Plug the camera's yellow video RCA plug into the yellow video jack on your capture card. Plug the camera's black power plug into the power jack on the capture card. Plug the camera's 1/8-inch audio miniplug into your sound card in order to capture audio. If you cannot locate a sound card, look for a input labeled MIC or with a microphone icon. Switch the camera's power switch to the **ON** position.

- 4** Insert the video capture card, gold edge first, into the empty PCI expansion slot.

Touch an unpainted metal part of your computer (the back is usually unpainted) to discharge static electricity. Static can damage your capture card.

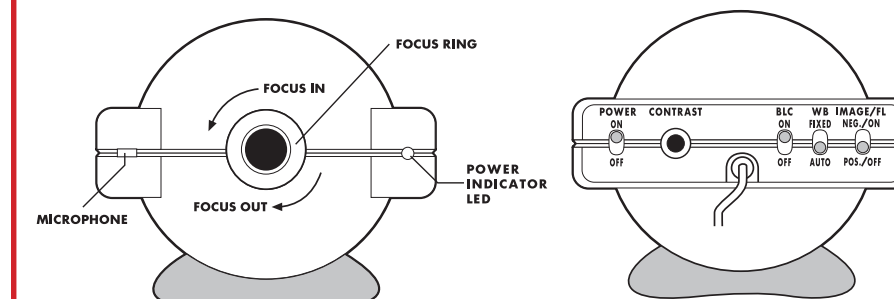
Take the capture card out of its plastic bag. The capture card's gold edge should fit snugly into the PCI expansion slot, and the metal bracket on the capture card will cover the opening on the back of the computer. You may need to use a firm back to front rocking motion to fit the card into the slot properly. Use the screw you removed in step 3 to secure the capture card.

- 3** Unscrew and remove the expansion slot cover at the back of an empty PCI expansion slot.

The expansion slot cover is located on the back of the computer and covers an opening on the computer case. The opening lines up with the PCI expansion slot inside the computer. PCI expansion slots are usually white plastic lined with metal. PCI slots are shorter than ISA slots, which are usually black plastic lined with metal.

## Camera Quick Reference

The NTSC compliant camera in your 3Com Bigpicture® package can be adjusted to account for a variety of room conditions and settings. The following instructions provide information on how to adjust the camera, what the adjustments do, and when to use them.



### Manual Focus

An image's focus is adjusted manually by rotating the black focus ring at the front end of the camera (left=focus in, right=focus out).

**NOTE:** When adjusting the focus, be sure not to turn the focus ring counter-clockwise so far that it unscrews from the camera. If exposed, the lenses or internal components of the camera may be scratched or damaged.

### Power Switch

The power switch is located on the back of the camera. A green LED on the front of the camera will remain illuminated when the camera is switched ON and plugged into the power jack of the capture card.

### Contrast Adjustment

The contrast button is used to adjust the contrast of the image produced by the camera. Press the button and hold it until the desired contrast is achieved, then release the button. Clicking the button once will not affect the contrast. If you continue to hold the button in, you will see the contrast change from low to high and back to low contrast continuously until the button is released. This continuous loop is depicted in the following diagram:



Contrast adjustment is most useful when there is not much difference between the light and dark portions of a picture. Increasing the contrast allows for a greater difference between the lights and darks in the picture and makes colors more vibrant.

### Back Light Compensation

Back light compensation (BLC) is used to maintain the correct amount of light exposure for the image. When in the ON position, BLC will adjust the camera so that the targeted (centermost) object will appear to be properly illuminated in the picture.

In situations where there is a very bright light source, such as a window or a lamp directly behind or beside the object targeted by the camera, the object can appear dark or even in silhouette. By switching the BLC ON and aiming the camera directly at the darkened object, the camera will adjust the lighting appropriately and clarify the object.

### White Balance Settings

The white balance (WB) switch can be set to either a FIXED or AUTO position. In the AUTO position, the camera automatically adjusts for different light conditions. When the switch is placed in the FIXED position, the camera freezes the white balance to the current setting and does not change until switched back to the AUTO mode, regardless of the lighting conditions.

The AUTO mode is most useful when the light conditions are constantly changing. Perfect color reproduction of a scene in stable lighting conditions can be achieved using the FIXED mode. To set the white balance correctly, put the camera in AUTO mode while the lighting conditions are similar to those in which the camera will operate. Next, hold a piece of white paper in front of the camera. After the camera has adjusted the white balance to the piece of paper (a few seconds), switch the camera to FIXED mode while the paper is still in front of the camera. The camera's white balance will remain fixed until the AUTO mode is switched on, even if the camera is turned off.

### Image Type or FL

Your camera will either have an Image Type switch (labeled IMAGE) or a Flicker Reduction switch (labeled FL).

If your camera has the Image Type (IMAGE) switch, you can use the switch to make the camera's image signal negative or positive. In the POS position, the camera displays a normal picture. In the NEG position, the camera displays a negative version of the true image. This mode is useful for viewing photo negatives.

If your camera has the Flicker Reduction switch (labeled FL), you can put the switch in the ON position to reduce the flicker caused by fluorescent lights.



# Troubleshooting

**PROBLEM: You see a blue screen instead of video in an application's video window.**

**POSSIBLE SOLUTION:** Verify that the camera is turned on (a green light on the front on the camera indicates power) and properly plugged into the capture card.

**POSSIBLE SOLUTION:** Set the video source option in the software you are using to "composite."

**POSSIBLE SOLUTION:** Verify that the video format is set to 160 x 120 pixels and 15-bit RGB.

**POSSIBLE SOLUTION:** There may be multiple video capture cards in the machine. In the Control Panel, double-click **Multimedia, Advanced**, and then **Video Capture devices**. (Windows 98 users click **Devices** instead of **Advanced**.) Double-click any devices other than "MSVIDEO: Brooktree Bt848 Capture Driver" and then select "Do not use this video capture device" and click **OK**.

**PROBLEM: A "No suitable DirectDraw provider" error box appears when starting a video application.**

**POSSIBLE SOLUTION:** DirectDraw or Direct X drivers were not loaded during the initial installation of your video capture card. Contact the manufacturer of your video card to obtain the required drivers.

**PROBLEM: Colored horizontal lines are displayed instead of video or picture is black and white.**

**POSSIBLE SOLUTION:** Make sure your software is set to use the NTSC standard, not PAL or SECAM.

**POSSIBLE SOLUTION:** Make sure the color saturation level in your software is not set to 0. A setting of 0 results in black and white.

**PROBLEM: The computer or software will not recognize the video capture card, the video capture card is not working, the system locks up when an application is run, or you see a black screen instead of video in an application's window.**

**POSSIBLE SOLUTION:** You may have an IRQ conflict. Your video capture card requires two system resources: an interrupt and a memory segment. If your system is not immediately detecting the card, there is a high probability that there is an IRQ conflict involving the video capture card. In the Windows Device Manager, double-click the **Sound, video and game controllers** option. Look for the "3Com Video Capture Card" item. If there is a yellow circle with an "x" or an "!" inside, Plug and Play discovered an IRQ conflict during installation. Plug and Play will not always alert you when such conflicts arise.

If your system indicates such a conflict, follow these steps to rectify the problem:

1. In Device Manager, double-click **3Com Video Capture Card**. A "3Com Video Capture Card Properties" window will appear.
2. Click **Resources**.
3. Write down the setting for the interrupt. (If no interrupt is listed, Windows was unable to find a clear interrupt. If an interrupt is listed, make sure the interrupt is not also being used by a non-Plug and Play device or REAL MODE device driver. If it is not, then your problem may be unrelated to an interrupt conflict.)  
**NOTE:** If your PC is loaded with many devices, there may not be a free interrupt available for the video capture card. If this is the case, you'll need to find an unused device that has a reserved interrupt and free that interrupt for use by the capture card. Many PCs reserve an interrupt for a PS/2 mouse or an IDE hard disk controller, even when these devices are not present on the system. If an interrupt is reserved for a device that you know is not present on your system, that interrupt can be reserved for your video capture card.
4. Go into your BIOS and disable the peripheral not being used (i.e., the PS/2 mouse or IDE controller mentioned in the preceding sidebar).
5. Enter Device Manager, highlight the device, then click the **Remove** button.
6. Restart Windows.
7. Examine the Plug and Play configuration. Your video capture card should be assigned to the IRQ you requested in the Device Manager.

**POSSIBLE SOLUTION:** Your Bigpicture® package is a PCI-based system. While most PCI-based systems configure themselves automatically via a Plug and Play compliant chip set and BIOS, there are occasional problems. Some of these systems require you to configure some or all of the following functions, usually by changing jumpers on the system board or BIOS setup parameters. (Check your

system manual for information on configuring these functions.)

- The PCI slot must be configured to support bus-mastering.
- The PCI slot must be configured to support INTA (PCI Interrupt Class A).
- The PCI INTA must be assigned to a free IRQ or set to "Auto".
- Ideally, the PCI slot should be set to LEVEL Trigger rather than EDGE Trigger.

On some systems, a specific IRQ will be assigned to a PCI slot in your CMOS settings that conflicts with existing equipment in your system. It's important to verify that your CMOS settings for PCI do not exhibit such conflicts if you are having problems installing your video capture card or if Plug and Play has trouble detecting the card. Not all PCs have PCI slots that support bus-mastering. In such a case, the capture card will have to be moved to another slot.

**PROBLEM: Your video capture card installed properly, but your system locks up when attempting to access video applications.**

**POSSIBLE SOLUTION:** There may be a Plug and Play memory overlap between your capture card and an existing video card with a S3/968 chip set (Diamond Stealth 64 PCI, etc.). Determine whether your system has such a card installed. If it does, follow these steps to alleviate the problem.

1. Click Windows **Start**.
  2. Point to **Settings** and click **Control Panel**.
  3. Click the **System** icon.
  4. Click the "Device Manager" tab.
  5. Double-click **Sound, video and game controllers**.
  6. Double-click **3Com Video Capture** to bring up the "3Com Video Capture Card" window.
  7. Click **Resources**.
  8. Uncheck the "Use Automatic Settings" box and double-click **Memory Range**.
  9. In the box marked "Value", change the address to 84000000-84000FFF. This range works for a wide variety of configurations. If this range is not free or conflicts with another device, increase the original memory range by 4 or decrease it by 8. (Remember: Add or subtract in hexadecimal!)
- Example: 80000000-80000FFF (original) increased by 4 hex = 84000000-84000FFF
- 80000000-80000FFF (original) decreased by 8 hex = 78000000-78000FFF

**PROBLEM: Windows detects the capture card but cannot find the drivers.**

**POSSIBLE SOLUTION:** If you have a CD recordable or rewriteable drive attached to your system, the installation utility may be looking in the wrong place for your video capture card's drivers. Point windows in the right direction by typing the letter associated with your CD-ROM drive when Windows asks for the location of the drivers.

**PROBLEM: Windows did not detect the video capture card.**

**POSSIBLE SOLUTION:** Click Windows **Start** and click **Shut Down**. When asked if you wish to shut down your computer, click **Yes**. When Windows indicates that it is safe to turn off your computer, turn it off and wait 15 seconds. Then turn the computer back on. Windows may detect your video capture card upon this restart even if it did not detect the card during the initial installation. If you see screens indicating that new hardware has been detected by Windows, follow the on-screen instructions to install the capture card's drivers. If not, continue with the next "Possible Solution".

**POSSIBLE SOLUTION:** Click Windows **Start**, point to **Settings**, and click **Control Panel**. Double-click the **System** icon and then click the **Device Manager** tab on the "System Properties" screen. Look for "Other Devices" or "Unknown Devices" in the list that appears. If you do not see either of these options in the list, continue with the next section to learn about our support options. If you do see one of these options, double-click the option. If the description that appears matches the video capture card, click the **Remove** button. Click **OK** when Windows asks if you wish to remove the device. Next, restart the computer as described in the previous "Possible Solution". If the computer does not detect the capture card after this second restart, please continue reading to learn about our support options.

## Help Resources

3Com offers a number of technical support options. Choose any one of the following if you need help with your new Bigpicture system or want to learn more about it.

### Bigpicture go-Day Installation Support Line

If you need further assistance with your Bigpicture product, call our dedicated 90-day installation support number. Representatives are waiting to assist you.

**888 877 4VID\***

\* 888 877 4VID is a 90-day installation support number. After 90 days, please call 847-262-5151.

### BBS

The 3Com BBS (Bulletin Board System) gives you access to customer and technical support documents and hundreds of helpful files and tips to help simplify using your modem. To connect to the 3Com BBS, follow these steps:

1. Start you favorite fax/data communications software. The software settings for the BBS are:
  - ANSI terminal emulation
  - Data bits: 8
  - Parity: none
  - Stop bits: 1
2. Put the software in Terminal mode.
3. Type ATDT18472626000 and then press ENTER. (If you need to dial a digit to access an outside line, such as "9", type that digit before the "1" in the phone number.)

If this is your first time connecting to our BBS, you will be asked to enter your name, create a password of your choice, and to fill out a questionnaire.

### Internet FTP

Provides free library containing the same files as the BBS site. Anonymous FTP to **ftp.usr.com**.

### Internet on Demand

Provides automatic technical support through a library containing product information, quick reference cards, and installation help. To obtain an index of available documents, send a blank e-mail to **support@usr.com**. To have a document e-mailed to you, send a document's multi-digit number as the subject.

### World Wide Web

3Com's home page contains the same information as the Internet on Demand listing as well as information about 3Com. This manual is available in electronic form in the customer support section of our Web page. Log on to **http://www.3com.com**.

### CompuServe

Connect to the 3Com forum with the command GO THREECOM. Leave a message on one of our message boards or e-mail us through CompuServe Mail for a response within 24 hours. Modem vendor forum address is GO THREECOM. Address messages to 76711,707.

### America Online

Connect to 3Com through America Online. Go to the Keyword field and type 3COM to connect to the 3Com forum.

### Fax and Technical Support Hotline

Technical questions about Bigpicture products can also be answered via fax or by technical support representatives. **847-262-4329**

### Are You Still Having Problems?

- Review this manual.
- Call or visit your Bigpicture dealer. They should be able to give you assistance.
- If your dealer can't help you, review the following options for contacting 3Com's Customer Support department. When you call, specify your video capture card's serial number (found on the capture card and on the outside of the box) and the software being used.

### If You Must Return the Product to Us

Contact 3Com Customer Support. If the support representative determines that you need to return the product, you will receive a SRO (Service Repair Order) number. You must have an SRO number before returning the product to us. Ship the unit, postage paid, in a strong corrugated cardboard box with plenty of packing material. Include your SRO number, name, and address on the shipping label as well as inside the package. Ship to the following address:

**3Com  
SRO # \_\_\_\_\_  
attn: Dock 15 PCD  
1800 W. Central Ave.  
Mount Prospect, IL 60056**

## Regulatory Information

### Manufacturer's Declaration of Conformity

3Com declares that the product 3Com Bigpicture® Video Phone Camera & PCI Capture Card (model 1689-03) conforms to the FCC's specifications:

Part 15:

- (1) this device may not cause harmful electromagnetic interference, and
- (2) this device must accept any interference received including interference that may cause undesired operations.

### Caution to the User

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Industry Canada (IC)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the interference-causing equipment standard entitled Digital Apparatus, ICES-003 of Industry Canada. Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: Appareils Numériques, NMB-003 édictée par l'Industrie Canada.

### UL Listing/CUL Listing

This information technology equipment is UL-Listed and CUL-Listed for use with UL-Listed personal computers that have installation instructions detailing user installation of card cage accessories.

### Radio and Television Interference

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. This Bigpicture product has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause interference to radio or television reception, which you can determine by monitoring reception when the Bigpicture system is installed and when it is removed from the computer, try to correct the problem with one or more of the following measures:

- Reorient the receiving antenna (for televisions with antenna reception only) or cable input device.
- Relocate the computer with respect to the receiver.
- Relocate the computer and/or the receiver so that they are on separate branch circuits.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the following booklet, prepared by the Federal Communications Commission, helpful:

How to Identify and Resolve Radio-TV Interference Problems  
Stock No. 004-000-0345-4  
U.S. Government Printing Office  
Washington, DC 20402

In accordance with Part 15 of the FCC rules, the user is cautioned that any changes or modifications to the equipment described in this manual that are not expressly approved by 3Com could void the user's authority to operate the equipment.

## 3Com Corporation Limited Warranty

3Com warrants this hardware product to be free from defects in workmanship and materials, under normal use and service, for the following length of time from the date of purchase from 3Com or its authorized reseller: 5 years. 3Com's sole obligation under this express warranty shall be, at 3Com's option and expense, to repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item, or if neither of the two foregoing options is reasonably available, 3Com may, in its sole discretion, refund to Customer the purchase price paid for the defective product. All products that are replaced will become the property of 3Com. Replacement products may be new or reconditioned. 3Com warrants any replaced or repaired product or part for ninety (90) days from shipment, or the remainder of the initial warranty period, whichever is longer.

YEAR 2000 WARRANTY: In addition to the Hardware Warranty stated above, 3Com warrants that each product sold or licensed to Customer on and after January 1, 1998 that is date sensitive will continue performing properly with regard to such date data on and after January 1, 2000, provided that all other products used by Customer in connection or combination with the 3Com product, including hardware, software, and firmware, accurately exchange date data with the 3Com product, with the exception of those products identified at 3Com's Web site, <http://www.3com.com/products/yr2000.html> as not meeting this standard. If it appears that any product that is stated to meet this standard does not perform properly with regard to such date data on and after January 1, 2000, and Customer notifies 3Com before the later of April 1, 2000, or ninety (90) days after purchase of the product from 3Com or its authorized reseller, 3Com shall, at its option and expense, provide a software update which would effect the proper performance of such product, repair such product, deliver to Customer an equivalent product to replace such product, or if none of the foregoing is feasible, refund to Customer the purchase price paid for such product. Any software update or replaced or repaired product will carry a Year 2000 Warranty for ninety (90) days after purchase or until April 1, 2000, whichever is later.

OBTAINING Warranty Service: Customer must contact a 3Com Corporate Service Center or an Authorized 3Com Service Center within the applicable warranty period to obtain warranty service authorization. Dated proof of purchase from 3Com or its authorized reseller may be required. Products returned to 3Com's Corporate Service Center must be pre-authorized by 3Com with a Return Material Authorization (RMA) number marked on the outside of the package, and sent prepaid and packaged appropriately for safe shipment, and it is recommended that they be insured or sent by a method that provides for tracking of the package. The repaired or replaced item will be shipped to Customer, at 3Com's expense, not later than thirty (30) days after 3Com receives the defective product.

Dead- or Defective-on-Arrival. In the event a product completely fails to function or exhibits a defect in materials or workmanship within the first forty-eight (48) hours of installation but no later than thirty (30) days after the date of purchase, and this is verified by 3Com, it will be considered dead- or defective-on-arrival (DOA) and a replacement shall be provided by advance replacement. The replacement product will normally be shipped not later than three (3) business days after 3Com's verification of the DOA product, but may be delayed due to export or import procedures. When an advance replacement is provided and Customer fails to return the original product to 3Com within fifteen (15) days after shipment of the replacement, 3Com will charge Customer for the replacement product, at list price.

3Com shall not be responsible for any software, firmware, information, or memory data of Customer contained in, stored on, or integrated with any products returned to 3Com for repair, whether under warranty or not. Warranties Exclusive: If a 3Com product does not operate as warranted above, Customer's sole remedy FOR BREACH OF THAT WARRANTY shall be repair, replacement, or refund of the purchase price paid, at 3Com's option. TO THE FULL EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, terms, or conditions, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES, terms, or conditions OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, satisfactory quality, CORRESPONDENCE WITH DESCRIPTION, AND NON-INFRINGEMENT, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. 3COM NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE OR USE OF ITS PRODUCTS. 3COM SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT OR MALFUNCTION IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLIGENCE, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO OPEN, REPAIR OR MODIFY THE PRODUCT, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OTHER HAZARDS, OR ACTS OF GOD.

Limitation of Liability. TO THE FULL EXTENT ALLOWED BY LAW, 3COM ALSO EXCLUDES for itself and its suppliers ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE or profits, LOSS OF BUSINESS, loss of information or data, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, even if 3com or its authorized reseller has been advised of the possibility of such damages, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE paid, AT 3COM'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

DISCLAIMER: Some countries, states, or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers, or the limitation of liability for personal injury, so the above limitations and exclusions may be limited in their application to you. When the implied warranties are not allowed to be excluded in their entirety, they will be limited to the duration of the applicable written warranty. This warranty gives you specific legal rights which may vary depending on local law.

GOVERNING LAW: This Limited Warranty shall be governed by the laws of the State of California, U.S.A. excluding its conflicts of laws principles and excluding the United Nations Convention on Contracts for the International Sale of Goods.