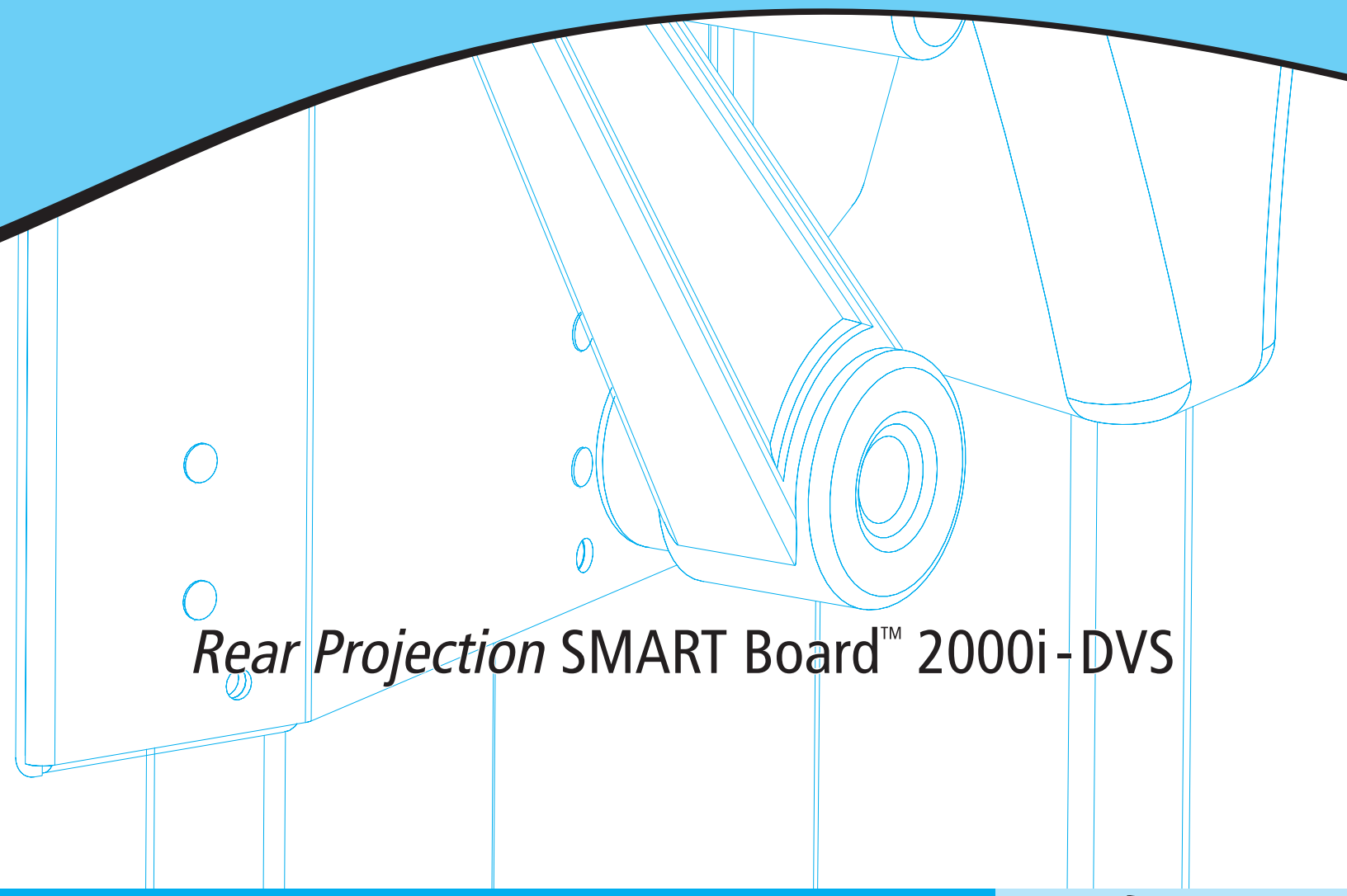
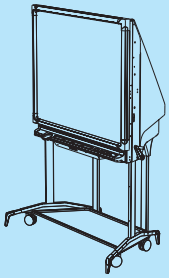
Installation Guide



Rear Projection SMART Board™ 2000i-DVS

Interactive Whiteboard



SMART Technologies Inc.

Registration Benefits

In the past, we've made new features such as handwriting recognition, USB support and SMART Recorder available as free software upgrades. Register your SMART product to be notified of free upgrades like these.

Keep the following information available in case you need to contact Technical Support:

Serial Number _____

Date of Purchase _____

Register online at: www.smarttech.com/registration

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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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U.S. Patent Nos. 5,448,263; 6,141,000; 6,326,954 and 6,337,681. Canadian Patent No. 2,058,219. Other U.S., Canadian and foreign patents pending.

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Important Information

Please read this manual carefully before setting up and using the *Rear Projection* SMART Board™ 2000i interactive whiteboard. With proper care, your 2000i should provide years of trouble-free service.

WARNING 	The projector inside the unit is a high brightness light source. Do not look directly into the beam of light. Prevent children from staring directly into the beam of light. Le projecteur qui se trouve à l'intérieur de l'armoire est une source de lumière à luminosité élevée. Ne fixez pas et ne regardez pas dans la direction du faisceau lumineux. Empêchez les enfants de regarder dans la direction du faisceau lumineux. El proyector que se encuentra en el interior de la cabina es una fuente de luz de alta luminosidad. No mire fija ni directamente al haz de luz. Evite que los niños fijen la vista en el haz de luz. Der Projektor im Schrank stellt eine Lichtquelle mit hoher Intensität dar. Blicken Sie nicht direkt in den Lichtstrahl. Verhindern Sie, dass Kinder direkt in den Lichtstrahl blicken. キャビネット内のプロジェクターは、高輝度光源です。ビーム光線を覗き込んだり、直接見たりしないでください。お子様がビーム光源を覗き込まないように注意してください。
WARNING 	Lock the casters and extend the anti-tip feet before you use the unit. Otherwise, the 2000i could tip over. Bloquez les roulettes et étendez les pieds avant d'utiliser l'appareil. Autrement, le 2000i risque de basculer et de tomber. Bloquee las ruedas y extienda los pies ajustables antes de utilizar la unidad. De no hacerlo, la pantalla 2000i podría volcarse. Sichern Sie die Rollenbremsen und fahren Sie die Sicherheitsstützen aus, bevor Sie das Gerät verwenden. Andernfalls könnte das 2000i umkippen. ユニットをご使用になる前に、キャスターをロックして、脚を伸ばしてください。以外の場合は、2000i がひっくり返る可能性があります。
WARNING 	Make sure an AC socket outlet is near the 2000i and remains easily accessible during use. Assurez-vous qu'une prise secteur se trouve à proximité du 2000i et demeure facilement accessible durant l'utilisation. Asegúrese de que hay una toma de corriente alterna cerca del 2000i y que es fácilmente accesible para su uso. Stellen Sie sicher, dass sich in der Nähe des 2000i eine Steckdose befindet und sie während der Verwendung auch leicht zugänglich bleibt. 2000i の近くに電源用のコンセントがあり、使用中に手が簡単に届くことを確認してください。

WARNING 	To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. Pour réduire le risque d'incendie ou de choc électrique, évitez d'exposer ce produit à la pluie ou à l'humidité. Para reducir el riesgo de incendio o de descarga, no exponga este producto a la lluvia o la humedad. Um das Risiko eines Feuers oder eines Stromschlags zu reduzieren, darf das Produkt weder Regen noch Nässe ausgesetzt werden. 火事や感電の恐れがありますので、この製品は雨にさらしたり湿気のあるところに置かないでください。

WARNING for European Customers 	The 2000i should *only* be used with European TN and TT power distribution systems. The 2000i is *not* suitable for older, IT-type power distribution systems found in some European countries. “This system (IT-type) is widely used isolated from earth, in some installations in France, with impedance to earth, at 230/400V, and in Norway, with voltage limiter, neutral not distributed, at 230V line-to-line.” (IEC 60950:1999) Contact qualified personnel if you're uncertain of the type of power system available where you're installing your 2000i.
AVERTISSEMENT pour les clients européens 	Le 2000i doit être utilisé *uniquement* avec les systèmes de distribution d’alimentation européens TN et TT. Le 2000i ne convient *pas* aux systèmes de distribution d’alimentation plus anciens de type IP utilisés dans certains pays européens. “Ce système (type IT) est largement utilisé isolé de la terre, dans certaines installations en France, avec une impédance à la terre, à 230/400V, et en Norvège, avec limiteur de tension, neutre non distribué, à 230V ligne à ligne. “ (IEC 60950:1999) Si vous avez des doutes sur le type de système d’alimentation disponible lors de l’installation de votre 2000i, contactez un personnel qualifié.
ADVERTENCIAS Para los clientes europeos 	La 2000i sólo se podrá utilizar con los sistemas eléctricos TN y TT europeos. Este modelo *no* está disponible para antiguos sistemas eléctricos de tipo IT que aún se utilizan en algunos países europeos. “Este sistema (IT) tiene una utilización muy extendida como núcleo aislado de tierra; en algunas instalaciones en Francia, con impedancia de tierra, a 230/400 V; y en Noruega, con limitador de tensión, a 230 V entre conductores.” (CEI 60950:1999) Si no está seguro del tipo de sistema eléctrico que posee, póngase en contacto con personal cualificado a la hora de instalar su modelo 2000i.

WARNUNG für europäische Kunden 	Das 2000i darf *nur* mit europäischen TN- und TT-Netzverteilern verwendet werden. Das 2000i eignet sich *nicht* für ältere Netzverteiler vom Typ IT, die in manchen europäischen Ländern zu finden sind. “Dieses System (IT-Typ) wird, von der Erdung isoliert, in einigen Installationen in Frankreich mit Impedanz zu Erde bei 230/400 V und in Norwegen mit Spannungsbegrenzer, neutral, nicht verteilt, bei 230 V Leitung zu Leitung verwendet.“ (IEC 60950:1999) Wenden Sie sich an qualifiziertes Personal, wenn Sie sich nicht sicher sind, welches Stromsystem dort zur Verfügung steht, wo Sie Ihr 2000i installieren.
ヨーロッパのお客様への警告 	2000i はヨーロッパの TN および TT 配電システムでのみ、使用する必要があります。 2000i はヨーロッパの一部の国で使用されている旧式の IT タイプの配電システムには適していません。「このシステム（IT タイプ）は、地面から離した状態で広く使用されていますが、一部フランスでは 230/400V でインピーダンスを通して接地され、ノルウェイでは、電圧制限器により中性非分散型で 230V のライン間電圧で使用されています」（IEC 60950:1999） 2000i をインストールする際に使用可能な電源システムのタイプに関して不明な点がある場合は、担当者までお問い合わせください。

Other Warnings and Safety Precautions

For operating safety and to avoid damage to the unit, follow these instructions.

1. Move the unit with care. Quick stops, excessive force and uneven surfaces can overturn the unit.
2. When you transport the 2000i, only ship it in an upright position and never lay the interactive whiteboard face down.
3. If you transport the 2000i over a distance, we strongly urge you to completely repackage it using the original packaging. This packaging was designed with optimal shock and vibration protection. If the original packaging is no longer available, pack all components with as much padding as reasonably possible to ensure that they are not exposed to excessive vibration or shock.
4. Clean the interactive whiteboard surface on a regular basis. Otherwise, dust may build up on the surface, adversely affecting the operation of the 2000i.
5. Do not touch the rear surface of the screen or apply isopropyl alcohol, water or acetone. If any of these fluids come into contact with this surface, the diffusion coating will be damaged, resulting in a permanent deterioration in display quality.
6. If you inadvertently smudge the rear surface of the screen, wipe it carefully with a soft cloth and alcohol-free glass cleaner. Do not spray the glass cleaner directly on the back of the screen; spray it lightly on the cloth, and then gently dab the rear surface until the marks are removed.

7. The 2000i uses digital cameras that are located inside the screen frame. Do not allow excess glass cleaner to flow into the crack between the frame and the writing surface, because the cleaner could damage these cameras.
8. Avoid setting up and using the 2000i in an area with excessive levels of dust, humidity or cigarette smoke.
9. Avoid exposing the 2000i to extreme heat or cold. The operating temperature range is from 41° F to 85° F (5° C to 29° C) with up to 80% humidity (non-condensing). The shipping and storage range is from -4° F to 95° F (-20° C to 35° C) with up to 80% humidity (non-condensing).
10. Unplug the unit during electrical storms or if you won't use it for an extended period of time.
11. This product has a three-wire grounding-type plug, which will only fit into an AC grounding-type power outlet. Make sure an AC socket outlet is near the 2000i and remains easily accessible during use. If you are unable to insert the plug into the outlet, have your electrician replace the obsolete outlet. Do not circumvent the safety features of the grounding-type plug.
12. Handle the power cord carefully and avoid excessive bending. Route the power cord so it’s unlikely to be walked on or pinched by items placed upon or against it. Do not modify the power cord.
13. If you require replacement parts, ensure the service technician uses replacement parts that are specified by SMART Technologies Inc., or parts with the same characteristics as the original.

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About the 2000i-DVS

The *Rear Projection* SMART Board 2000i interactive whiteboard is a height adjustable, rear projection system with an integrated LCD projector and a 67" (170.2 cm) diagonal interactive SMART Super Screen.

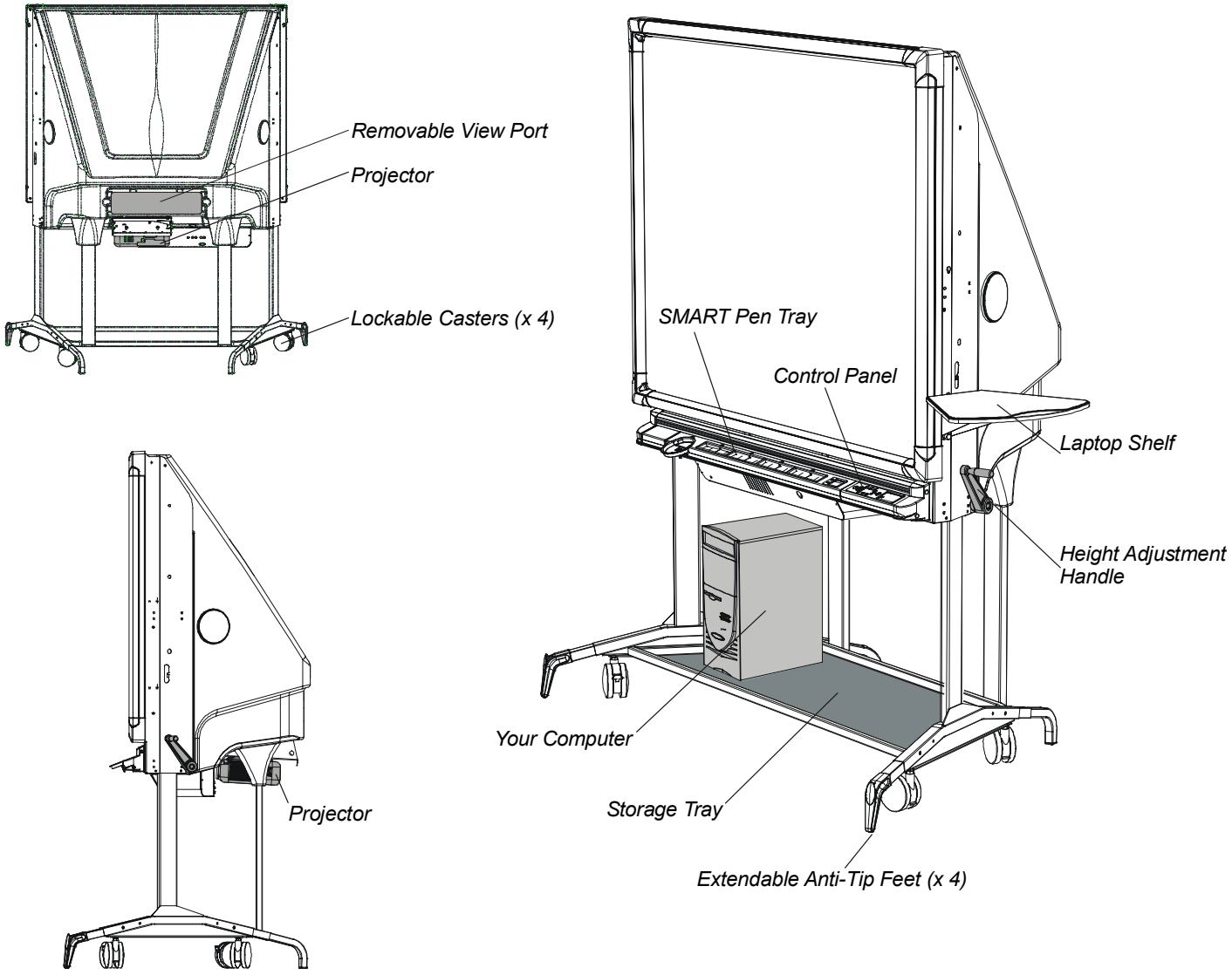
To enable rear projection capability, a mirror system redirects the projected image from your computer, VCR, DVD player or guest laptop onto the back of the interactive whiteboard screen, eliminating the distracting shadows that sometimes occur with a front projection system. You can then perform any normal computer operation, such as opening or closing an application, scrolling through a file, or opening your browser, just by touching the screen. If you've purchased the X-Port™ 20 option, you can switch between three different projector input sources with the press of a Control Panel button.

With SMART's recently developed Digital Vision Touch (DViT™) technology, the 2000i uses digital cameras to track objects on the interactive whiteboard. Each camera is calibrated to recognize the position of a pen tray tool or your finger on the screen surface and to send this information to the computer, which translates it as mouse clicks or electronic ink.

Features

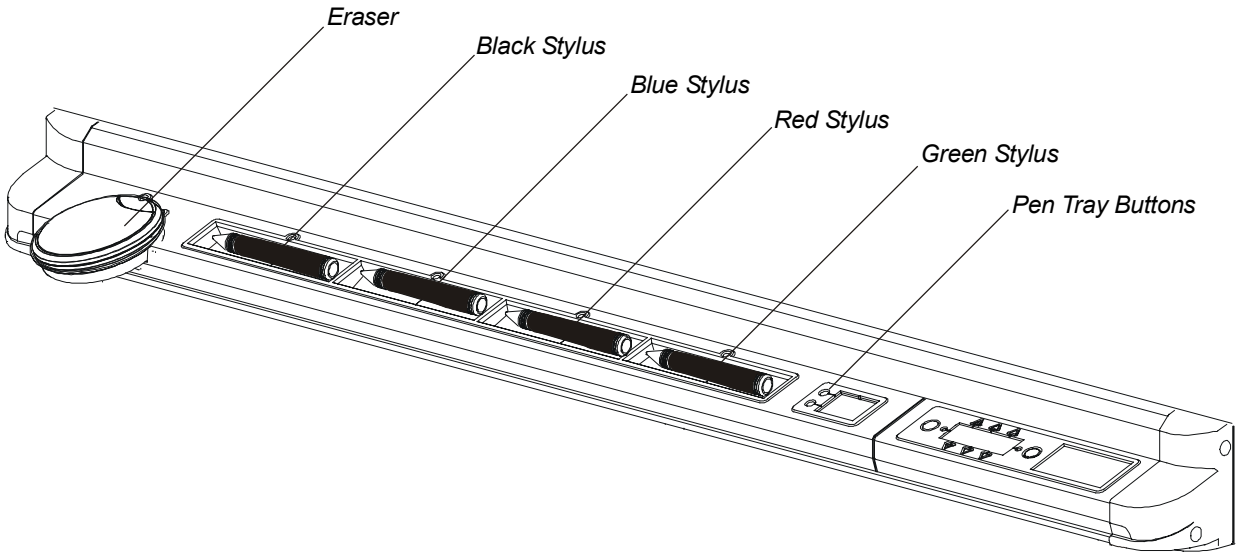
- A touch sensitive, rear projection interactive whiteboard that enables you to do everything you can do at a computer workstation – open files, conference with others, create new documents or edit existing ones, visit Internet sites, play video clips, etc. – simply by touching the screen. You can also write over any live application in electronic ink using a pen tray stylus or your finger, and then save these annotations to a Notebook™ file for future reference and distribution.
- An integrated 1800 ANSI lumens, SVGA (800 x 600) projector with short-throw lens
- An audio system and a pen tray (including four styluses and an eraser)
- A Control Panel next to the pen tray with easily accessible projector, volume and source switching controls. The Control Panel also provides button-press access to Notebook software and the Floating Tools.
- A videoconferencing/laptop shelf
- A height adjustment handle that raises and lowers the screen from 69" (175.3 cm) to 83" (210.8 cm)
- Audio jacks at the rear of the unit let you connect the audio output from a laptop, a VCR, DVD player, or a room audio system
- Minimal floor space requirements. The 2000i fits easily through any standard doorway for true room-to-room mobility.

Getting to Know Your 2000i



Major Components of the 2000i

Pen Tray Features



The Pen Tray

Using a Pen Tray Stylus	**Using the Pen Tray Buttons**
To write over the computer image with electronic ink, just pick up a stylus from the pen tray and write on the screen. You can use SMART Board software to change any or all of these styluses to highlighters, assign one of 16 colors to them, or alter their width. You can also change the size of the area erased by the pen tray eraser. To reconfigure the styluses or eraser, click the SMART Board icon in the system tray ( ), select **Control Panel,** and click the **Pen Tray** tab. **NOTE:** The provided styluses have black tips because the digital cameras can more readily detect dark objects. If you need to use a different stylus, choose one with a dark tip.	Press the top pen tray button to make the SMART Keyboard appear for on-screen typing and handwriting recognition. Press the bottom button to make the next contact with the interactive whiteboard a right click. You can reconfigure these buttons to perform any of the following functions: • print the current page • move to the previous or next Notebook page • clear all annotations from the current Notebook page • produce a floating mouse To reconfigure the pen tray buttons, click the **SMART Board** icon in the system tray ( ), select **Control Panel**, and click the **Pen Tray** tab.

The NEC VT465 Projector

CAUTION

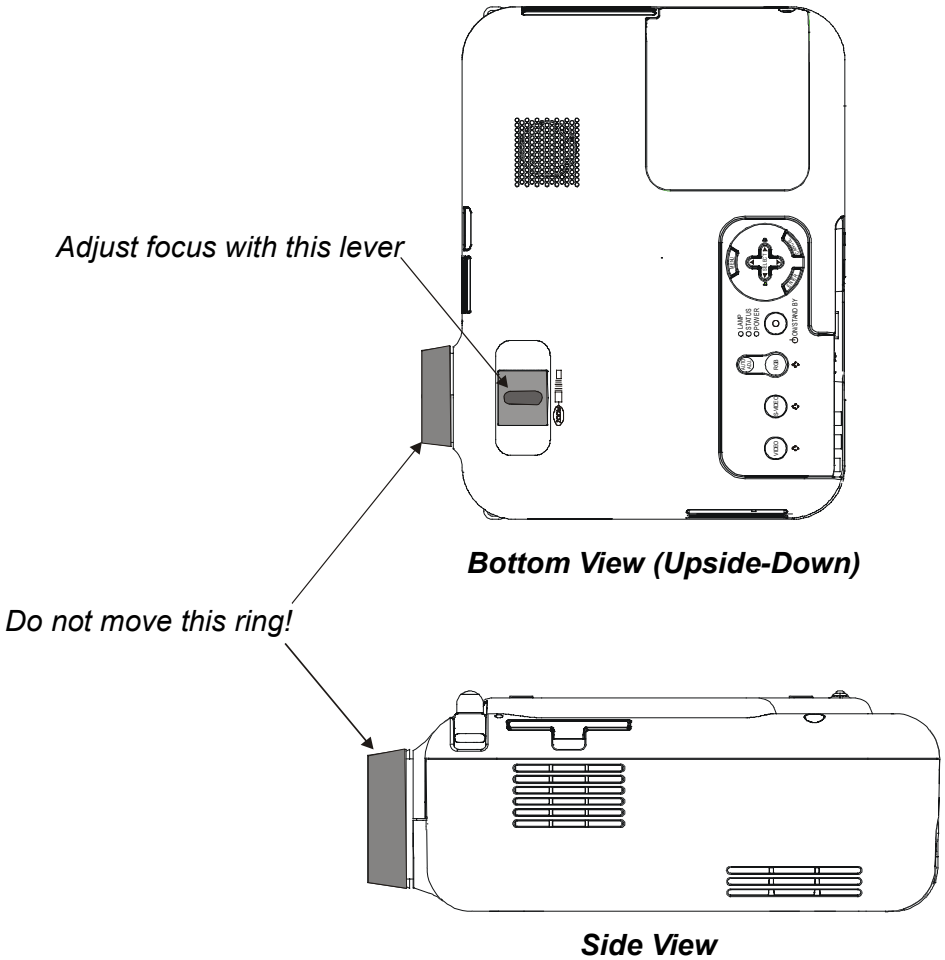


Do *not* adjust the blue ring that surrounds the short-throw, customized projector lenses, even though the *NEC VT465 User's Manual* states that you should use this ring to obtain the best focus. You must disregard this information. If you move the blue ring, you may cause the lenses to separate.

Rather, use the Zoom lever on the projector, which has been modified to adjust the image focus. Again, contrary to the *NEC VT465 User's Manual*, the Zoom lever will not adjust the image size on the screen.

The NEC VT465 projector is secured upside-down on the projector platform. For optimal performance in the 2000i, the projector has been changed in two significant ways from the description of how it works in the *NEC VT465 User's Manual*:

- The Zoom lever does *not* change the size of the projected image. Instead, it functions as a Focus lever.
- The blue ring no longer adjusts focus, and you should not move it under any circumstances. Moving this ring may cause the lenses to separate.



Bottom View (Upside-Down)

Side View

NOTE: For more information on adjusting the projected image, turn to page 13.

Projector Settings

We've configured your projector settings for optimal performance with the 2000i. However, if these settings are accidentally altered, follow the procedure below to restore them.

To set or restore the optimal settings for the NEC VT465 projector

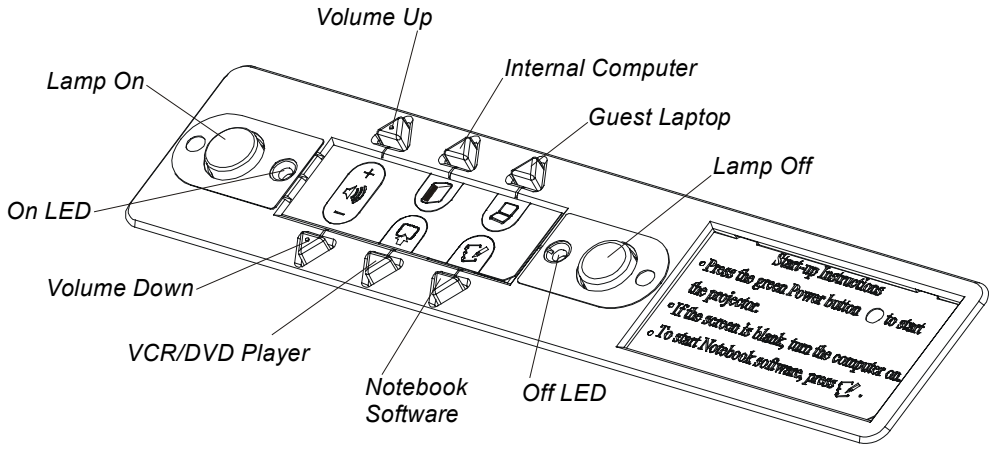
1. Press the **Menu** button on the projector remote control or on the projector (you'll have to reach under the projector).
2. Select **Setup > Orientation > Ceiling Rear** to orient the projected image for rear projection.
3. Select **Image > Auto Keystone > Off** to ensure optimal image quality.
4. Select **Advanced > High Speed Fan Mode > Off**. While this is a default setting, it's sufficiently important to warrant special mention.
5. Select **Advanced > Page2 > Auto Adjust > On** to automatically determine the best resolution for the current RGB input signal, compensating for resolution differences among various input devices (such as guest laptops).
6. Click **OK**.

   NOTE: All other settings are the NEC factory default settings. See pages E-26 to E29 of the *VT465 User's Manual* for a full description of all default settings.

For information on projector maintenance and complete instructions on replacing the projector lamp and filter, turn to page 36.

Control Panel

Use the Control Panel to turn the projector lamp on and off, change the display source for the projector, open Notebook software, and adjust the volume of the internal sound system.



The Control Panel

The Lamp On and Lamp Off Buttons

In normal operation, you should keep the projector powered up all the time. However, to conserve the lamp, put the projector into standby mode at the end of your session (or at the end of the day). In standby mode, the projector lamp is powered down, but the projector itself remains on.

To put the projector into standby mode, press the Lamp Off button on the Control Panel. For the next three minutes, the lamp is in a reversible standby mode in which the screen appears black, even though the projector lamp remains on, allowing you to quickly restore the display by pressing any button on the Control Panel. After three minutes, the lamp cools down for 60 seconds and then powers off. You can skip this three-minute reversible standby period by pressing *and holding* the Lamp Off button for three seconds. To power up the projector lamp, press the Lamp On button.

For the current status of the lamp, check the LEDs beside the Lamp On and Lamp Off buttons, and then check the table below.

LED On	**LED Off**	**Lamp Status**
Flashing moderately quickly	Off	Lamp is powering up. During this 60-second period, the Lamp On and Off buttons are disabled.
Solid	Off	Lamp is fully powered up.
Flashing occasionally (short flashes followed by long pauses)	On	Lamp is off.

LED On (Cont'd)	LED Off (Cont'd)	Lamp Status (Cont'd)
Off	Flashing very quickly	Lamp is in three-minute reversible standby mode. In this mode, the screen appears black, even though the projector lamp remains on, allowing you to quickly restore the display by pressing any button on the Control Panel. After three minutes, the lamp cools down for 60 seconds before powering off.
Off	Flashing slowly	Lamp is cooling down. This 60-second cool-down follows the three-minute reversible standby period. During this time, all Control Panel buttons are disabled.

Volume Control Buttons

Press the Volume Up (+) button to increase the volume and the Volume Down (–) button to decrease the volume. The 2000i retains your settings for each source.

The default volume is 0. To restore this default, press the + and – buttons simultaneously.

Source Buttons

You can use the source buttons to switch the video and audio sources for the projector and cabinet audio amplifier. Please note that switching sources takes a few seconds, and all buttons on the Control Panel are disabled during that time.

Button	Source
	VCR/DVD player
	Internal computer
	Notebook software. The internal computer source must be active. For information on using Notebook software, see page 33. Press this button and hold it down for three seconds to open the Floating Tools. For information on using the Floating Tools, see page 34.
	Guest laptop **NOTE:** You can only switch to a connected guest laptop if your system includes the optional X-Port 20 switch option.

Installing Your 2000i

This section of the manual describes how to:

- set up the 2000i (page 8)
- install and connect the host computer (page 10)
- adjust the projected image (page 13)
- connect the videoconferencing/laptop shelf (page 19)
- install SMART Board software (page 21)
- connect a guest laptop (page 23)
- connect a VCR or DVD player (page 24)
- connect an external sound system (page 25)
- connect an external projector or monitor (page 26)

Setting Up the 2000i

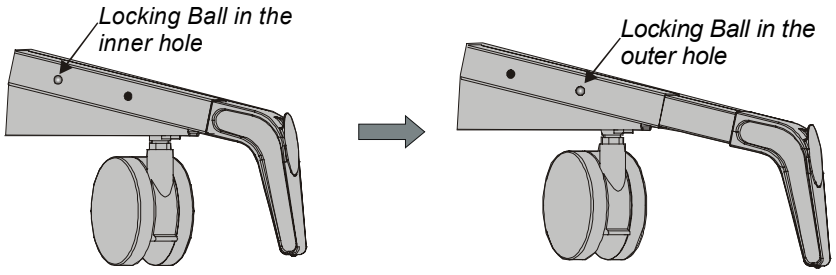
1. Remove the unit from its shipping carton. (To do this, follow the *Unpacking Instructions.*)
2. Unpack the remaining contents of the shipping carton and wheel the unit to a location that's within reach of a power source.

   NOTE: Leave enough space around the unit to comfortably perform the following assembly and connection procedures.
3. Lock the casters by pressing down on the caster-lock tab; unlock the casters by pressing up on this tab, as shown in the figure below.



A Locked and Unlocked Caster

4. Extend all four of the anti-tip feet. You'll see two holes on the outer side of each leg. To extend the feet, depress the locking ball in the inner hole, and then pull the leg out until the locking ball engages in the outer hole.



Extending an Anti-Tip Foot

WARNING



Lock the casters and extend the anti-tip feet before you use the unit. Otherwise, the 2000i could tip over.

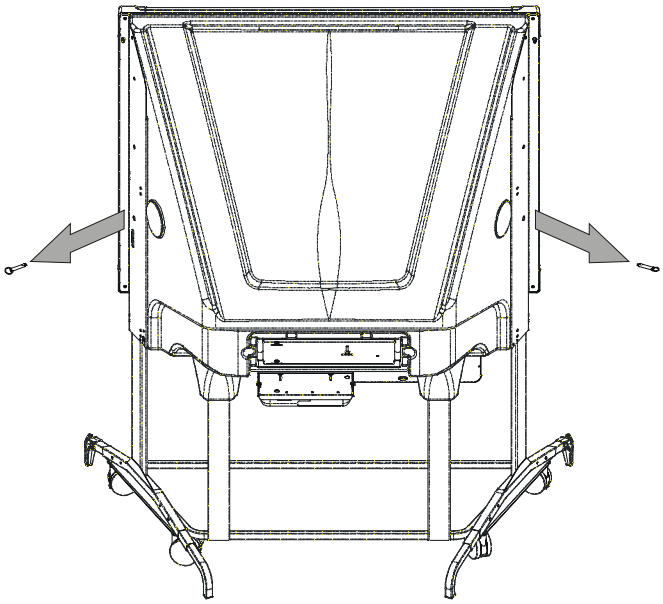
Bloquez les roulettes et étendez les pieds avant d'utiliser l'appareil. Autrement, le 2000i risque de basculer et de tomber.

Bloquee las ruedas y extienda los pies ajustables antes de utilizar la unidad. De no hacerlo, la pantalla 2000i podría volcarse.

Sichern Sie die Rollenbremsen und fahren Sie die Sicherheitsstützen aus, bevor Sie das Gerät verwenden. Andernfalls könnte das 2000i umkippen.

ユニットをご使用になる前に、キャスターをロックして、脚を伸ばしてください。それ以外の場合は、2000i がひっくり返る可能性があります。

5. Remove the bag that surrounds the projector.
6. Remove the locking pins from either side of the 2000i.



Removing the Locking Pins

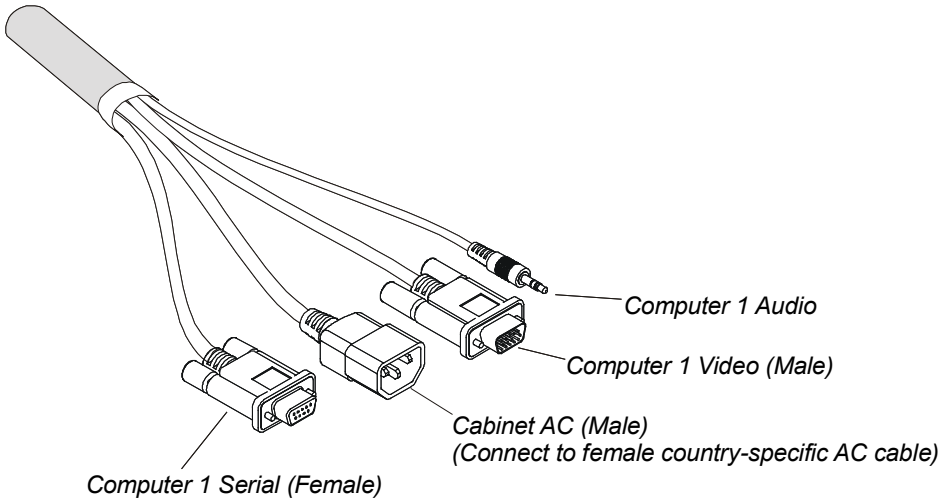
Installing a Computer

To connect a computer

1. Slide the computer into place on the bottom storage shelf, above the computer straps, and then secure the straps around the computer.

   NOTE: The straps allow you to roll the unit from room to room without removing the computer. However, these straps will not secure the computer in place during unit shipment. If you ship the unit, remove the computer first.

2. Locate the bundle of labeled cables (to the right of the projector) hanging down towards the storage tray.



Computer and Power Cables

3. Connect the **Computer 1 Video Out** cable to the Monitor Video connector.
4. Connect the **Computer 1 Audio** cable to the Audio Line OUT connector.
5. Connect the **Computer 1 Serial** cable to an available COM port.

   NOTE: To connect a computer that has no available serial port, connect the SMART USB adapter between the **Computer 1 Serial** cable and the USB port on the computer.

6. Connect the Mouse and Keyboard cables (not supplied) to the PS/2 mouse port and the PS/2 keyboard port on the computer.

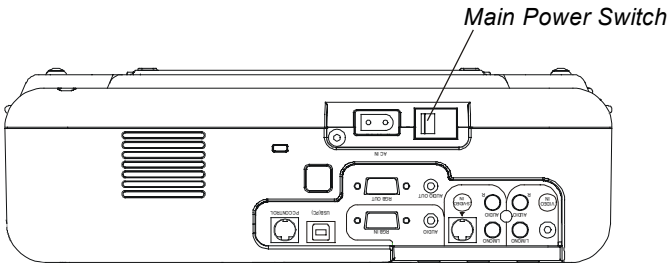
To connect the power cables

1. Connect the Computer **AC** ∿ power cable to an available power outlet or power bar (not supplied).
2. Connect the 2000i **AC** ∿ power cord to the country-specific AC cord in the accessory box. Then connect this AC cord to an available power outlet or power bar (not supplied).

Powering up the 2000i

1. If the projector is not on, press the main power switch.

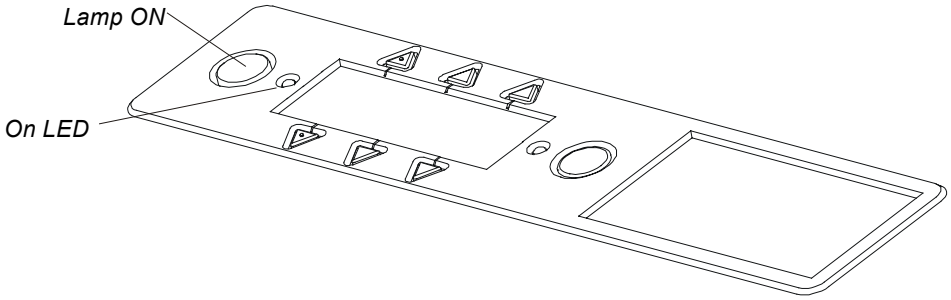
   NOTE: The projector in the figure below is shown upside down, just as it's intalled in the 2000i.



Main Power Switch on Projector

2. At the front of the 2000i, press the power button on the computer.
3. Turn on the projector lamp by pressing the **Lamp On** button on the Control Panel (to the right of the pen tray).

   The LED indicator beside this button flashes quickly for 60 seconds, and then remains steadily illuminated when the projector lamp has powered up.



Lamp On Button on the Control Panel

When an image displays, adjust the computer power settings and the image alignment on the interactive screen. Then install the SMART Board software CD, configure the COM port, and perform a brief orientation procedure. To do this, complete the procedures on the pages that follow.

NOTE: You should leave the computer and the projector on at all times (so the projector is either in use, with the lamp illuminated, or in standby mode). However, you can set the computer to save power during periods of inactivity. The following section describes how to do this.

Adjusting the Computer's Power Settings

For greater ease of use, you should keep the computer on all the time. However, to help preserve the computer's hard drive(s), and the life of the projector lamp, you should also set the monitor (the interactive screen) and hard drive(s) to automatically go into standby after a specified period of inactivity. You can do this by configuring the Windows operating system Power Management Feature. If you do keep the computer on all the time, reboot the computer occasionally to reload the operating system.

NOTE: You may prefer to shut the computer down at the end of the day.

On shipment, the projector is configured to shut down three minutes after no new input signal is received, so if the monitor shuts off after a period of inactivity, so will the projector lamp. During the shutdown period, the interactive screen turns blue. If you change your mind and want to use the system again, you can restore the computer display by simply touching the screen. At the end of the shutdown period, the projector lamp shuts down completely and the screen turns black.

You should avoid using a screen saver, regardless of whether you power the computer down daily or not. The benefit of a screen saver – to avoid image burn-in, either on monitors or plasma displays – has no bearing on a projected system.

NOTE: You can't adjust the power settings on Windows NT 4.0 systems, so the computer must be left on with full power, or shut down at the end of the day and started up again.

To adjust a computer's default power settings (Windows)

NOTE: This procedure may vary, depending on which version of the Windows operating system you're running.

1. Click the **Start** button on the Windows taskbar, point to **Settings** and select **Control Panel**.
2. Double-click **Display** and click the **Screen Saver** tab.
3. Under **Energy saving features of monitor**, click the **Settings** (or **Power**) button.

   The *Power Management Properties* (or *Power Option Properties*) dialog box appears.
4. Select **After 1 hour** from the **Turn off monitor** list.

   NOTE: This is a recommended setting. You can select any duration you want.
5. In the **Turn off hard disks** list, select the period of inactivity that must elapse before hard disk shutdown.

   NOTE: For the above step, we recommend that you select **After 2 hours**. This extended time period ensures that guest laptop presenters – or participants in lengthy meetings characterized by large gaps in activity – do not experience an unexpected hard disk shutdown.
6. Click the **Apply** button and then click **OK**.

   When the system reaches the period of inactivity specified in step 4, the computer stops sending an RGB signal. If no other source is active, the projector goes into a three-minute shutdown mode, during which time the screen turns blue. After three minutes, the projector shuts down completely and the screen turns black.

   NOTE: To immediately restore the input signal from the computer during this three-minute projector shutdown period, touch the blue screen (or press a keyboard key). This function is especially handy when you're a passive participant in a lengthy data conference.

Adjusting the Projected Image

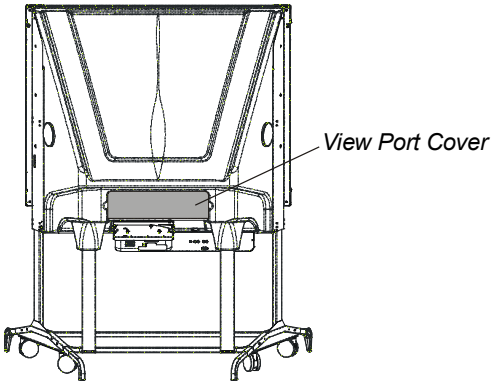
CAUTION



Do *not* adjust the blue ring that surrounds the short-throw, customized projector lenses, even though the *NEC VT465 User's Manual* states that you should use this ring to obtain the best focus. You must disregard this information. If you move the blue ring, you may cause the lenses to separate.

Rather, use the Zoom lever on the projector, which has been modified to adjust the image focus. Again, contrary to the *NEC VT465 User's Manual*, the Zoom lever will not adjust the image size on the screen.

You may need to adjust the projector to obtain a focused image that fits on the screen. Complete the four adjustment procedures that follow only as required. For the first three, (adjusting image roll, adjusting the image laterally, and adjusting the image size), you must watch the image on the back of the screen while making adjustments. You'll also need to remove the view port cover (attached with hook-and-loop fastener strips), to access the adjustment hardware at the rear of the unit.

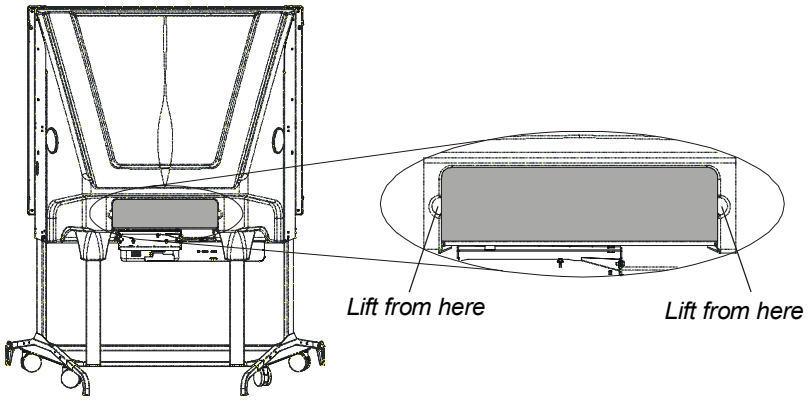


Location of the View Port Cover

For the final procedure (adjusting the image vertically), adjust the image while watching it from the front of the unit.

To remove the view port cover

1. Grasp the view port cover in the middle of each short edge, and pull it away from the unit.



Removing the View Port Cover

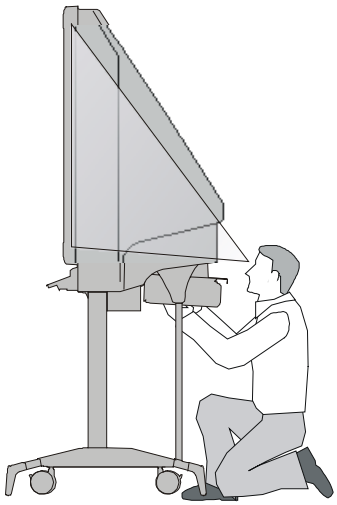
You can now access the top of the projector to perform the following image-adjustment procedures.



Roll Adjustment

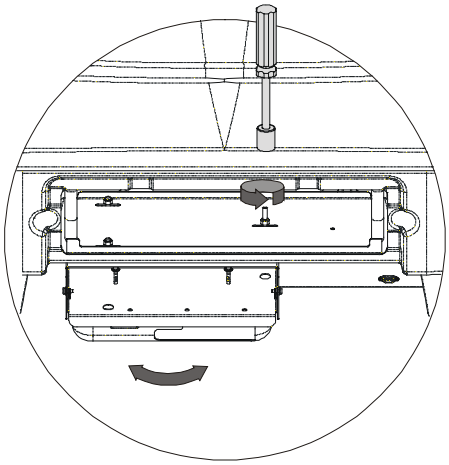
To adjust the image roll

1. Crouch behind the projector and look at the projected image through the view port.



Position for Adjusting Image Roll

2. While carefully observing the bottom edge of the image at the right side, use the supplied 7/16" nut driver to loosen or tighten the nut that's located on the right side of the projector plate, as required (see the following figure).



Using the Nut Driver to Adjust Roll

To adjust the image laterally

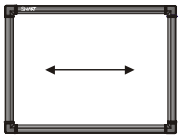
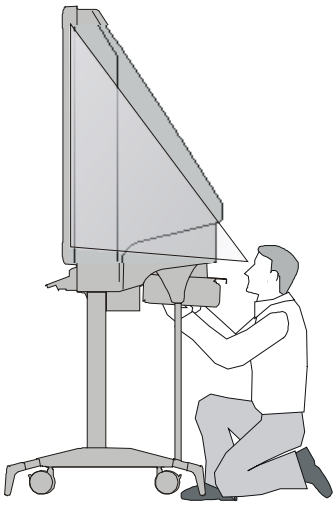


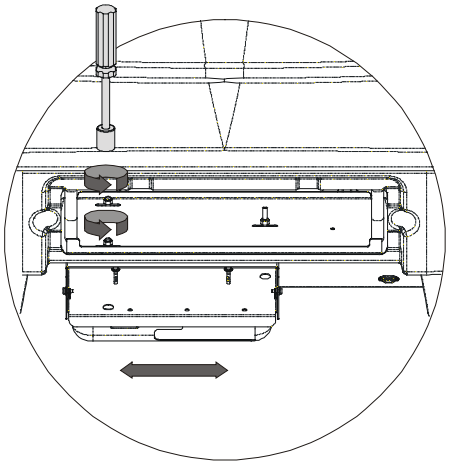
Image Side-to-Side Adjustment

1. Crouch behind the projector and look at the projected image through the view port.



Position for Adjusting the Image Laterally

2. Using the supplied 7/16" nut driver, loosen the two nuts that are located on the left side of the projector plate.



Using the Nut Driver to Adjust the Image Laterally

3. Slide the projector plate to the right or left, and then tighten the two nuts.

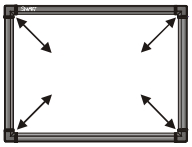
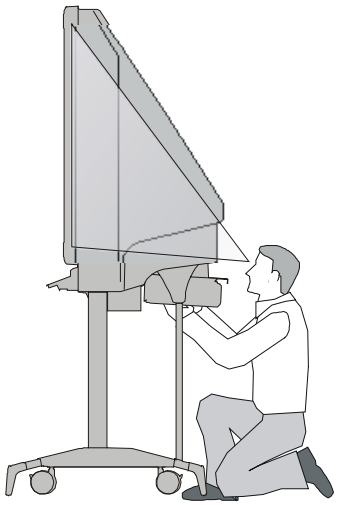


Image Size Adjustment

To change the image size

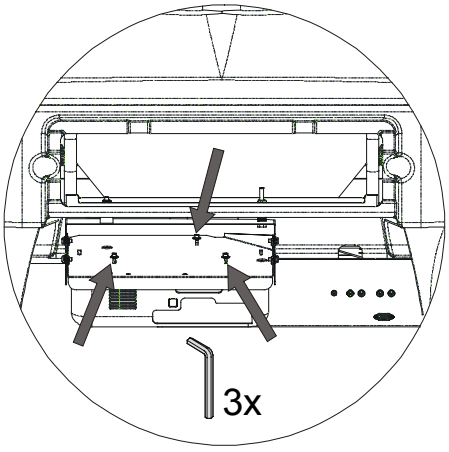
1. Crouch behind the projector and look at the projected image through the view port.



Position for Changing the Image Size

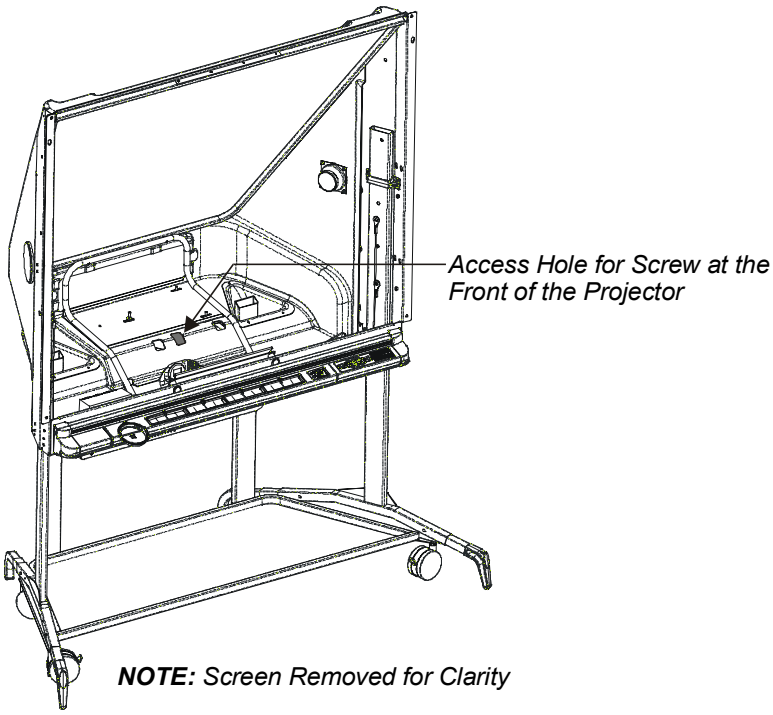
2. Using the security key (TR20 Torx® tamper-recess key) from the accessory kit, loosen the three Torx M4 security screws that secure the projector to the projector plate.

   NOTE: You'll find these screws on the top of the projector plate, one at the front of the projector and two at the back.



Loosen the Three Hex Screws to Change Image Size

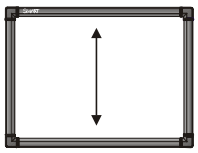
   To access the single screw at the front of the projector, you must reach through the view port to the front of the projector, and maneuver the security key through the center access hole in the projector cover (see the following figure).



Location of Access Hole at the Front of the Projector

NOTE: As you maneuver the security key through the access hole, watch it from the back to see when it engages with the screw.

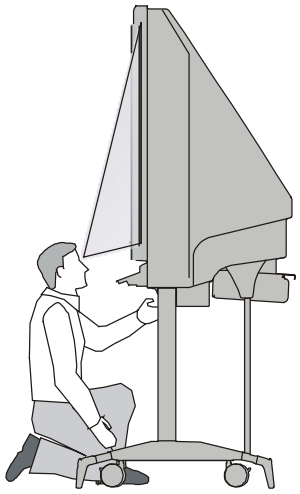
3. Slide the projector backward or forward to alter the image size.
4. When the image is a good size, tighten all three screws that you previously loosened.



Move Image Up or Down

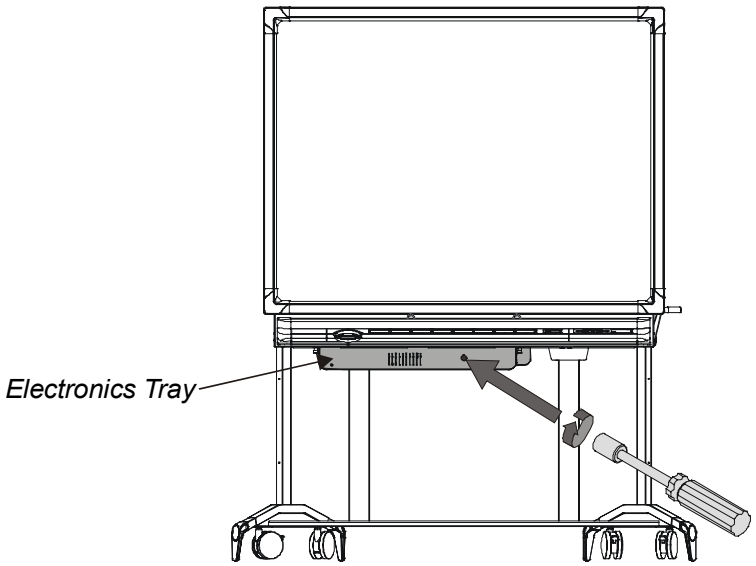
To move the image vertically

1. Move to the front of the unit and crouch down, facing the screen.



Position for Moving the Image Up or Down

2. Look underneath the pen tray and locate the Electronics Tray. Locate a large access hole covered with a plastic cap on the right side of the Electronics Tray.

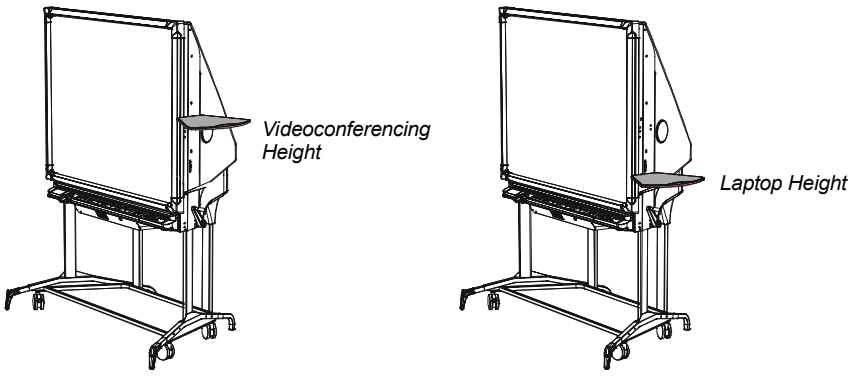


Loosening the Bolt to Move the Image Up or Down

3. Remove the plastic cap that covers the access hole. If the cap seems tight, carefully pry it off with a screwdriver, inserting the screwdriver into the small opening at the top of the cap.
4. Loosen and tighten the bolt inside the access hole with the supplied 7/16" nut driver to adjust the image vertically.
5. Replace the plastic cap you removed in step 3.

Installing the Videoconferencing/Laptop Shelf

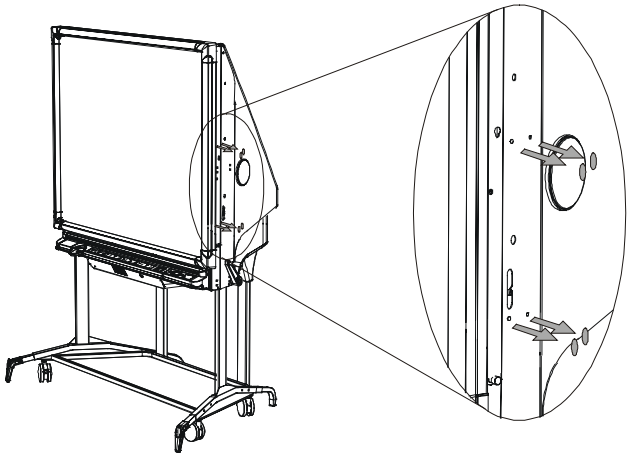
You can position the videoconferencing/laptop shelf just above the height-adjustment handle (for laptop use), or higher up on the frame (for use with a videoconferencing camera). You can also install the shelf on either side of the unit.



Shelf Height Option

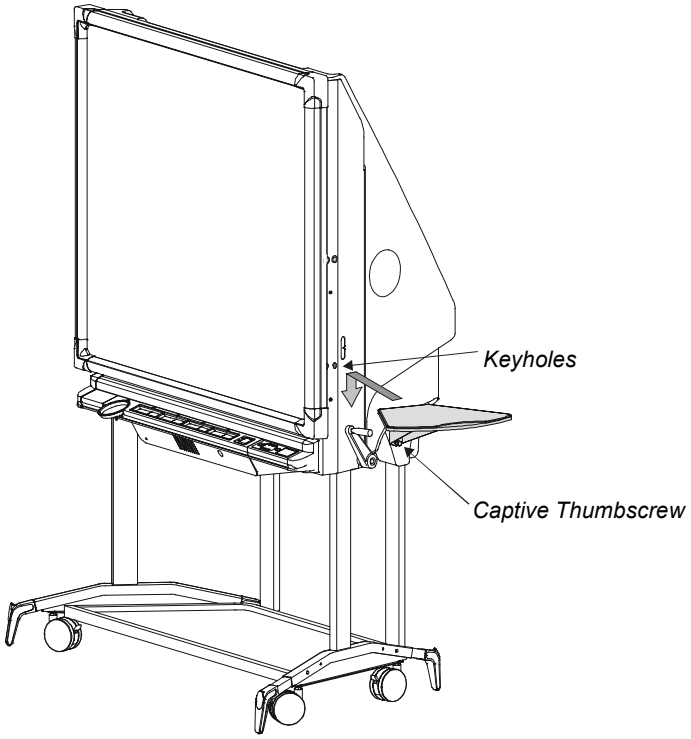
To install the videoconferencing/laptop shelf

1. Remove the plastic hole covers at the location where you want to mount the shelf.



Removing the Hole Covers

2. Hook the shelf to the keyholes, and then push the shelf firmly down.



Attaching the Shelf

3. Push the captive thumbscrew at the bottom of the shelf into the thumbscrew hole and tighten.

Matching the Computer Resolution to the Projector Resolution

It's very important that the computer and projector resolutions match so the projected image properly fills the screen. Since the projector resolution is 800 x 600 (SVGA), you must ensure the computer resolution is also set to 800 x 600.

NOTE: If the computer resolution is set to anything other than this optimal resolution, you may not see the entire image, or the image may be too small to fill the screen, even with further adjustments.

To set your computer resolution to match the projector resolution (Windows operating system)

NOTES

- You may need to perform the following procedure using your computer monitor, as resolution differences can impair the visibility of the image on the interactive whiteboard screen.
- This procedure may vary, depending on which version of the Windows operating system you're running.

1. Click the **Start** button and then select **Settings > Control Panel**.

   The *Control Panel* window appears.

2. Double-click **Display**.

The *Display Properties* dialog box appears.

3. Click the **Settings** tab.
4. Move the slider to 800 x 600.
5. Click the **Apply** button and then click **OK**.
6. Restart your computer, if required.

To set your Macintosh computer resolution to match the projector resolution

1. Click the **Apple** menu.
2. Click **Control Panels**.
3. Select **Monitors**.

   The *Monitors* dialog box appears.
4. Click the **Options** button.
5. In the **Select a monitor setting** list, select 800 x 600, and then click **OK**.

Installing SMART Board Software

The installation process should start automatically after you insert the SMART Board software CD into your CD-ROM drive. Otherwise, install the software as follows.

To install SMART Board software for Windows operating systems

1. Insert the SMART Board software CD into your CD-ROM drive.

   The SMART Board software setup program should start automatically. If it doesn't, select **Start > Run** and enter **x:\autorun.exe** (where x: is your CD-ROM drive). Follow the on-screen instructions to install SMART Board software.

   At the end of the installation, you can choose to put a shortcut to SMART Board software in your Startup Folder. We recommend that you do so. Then the SMART Board tools will always be open, and your interactive whiteboard will be fully functional whenever you start up your system.
2. Click **Yes** to insert a shortcut to SMART Board software in the Startup folder, or click **No** to prevent SMART Board software from starting whenever you start up your system.

To install SMART Board software for Macintosh computers

1. Insert the SMART Board software CD into your CD-ROM drive.
2. Double-click the **SMART Installer** icon.

   The *SMART Installer* window appears.
3. Click the **Continue** button and then follow the instructions on your screen.

Configuring and Orienting the Interactive Whiteboard

After you install SMART Board software, you must configure and orient the interactive whiteboard.

You may need to specify whether the serial or USB port on the host computer connects to the interactive whiteboard. If you're running SMART Board driver version 6.0 (or later), the COM port configuration process is entirely automatic, unless:

- the Windows operating system you're running does not perform plug and play (e.g., Windows NT 4.0 or ME)

- the Windows operating system fails to announce that it has *Found New Hardware*

Then you must manually configure the COM port. After you do this, you should orient the interactive whiteboard to ensure accurate tracking of your finger or a pen tray tool. If the projected image becomes misaligned, you must perform the orientation procedure again.

To select a COM port for the interactive whiteboard

1. Select **Start > Programs > SMART Board Software > SMART Board Tools**.
2. Click the **SMART Board** icon in the system tray and select **Control Panel**.

   The *SMART Board Control Panel* appears.
3. On the **Boards** tab, click the **Connect** button.

   The *Select COM Port* dialog box appears.
4. If you know the COM port to which the SMART Board interactive whiteboard is connected, you can type it or select it from the COM port list. Then click the **Select** button.

   OR

   If you're unsure of the correct COM port, click the **Detect SMART Hardware** button to initiate hardware detection. SMART board software searches your COM ports for the presence of an attached interactive whiteboard.

   The interactive whiteboard is now touch sensitive. You can write over any projected application with a pen tray stylus.

To orient the interactive whiteboard

Click the **SMART Board** icon and select **Orient**, and then follow the on-screen instructions. You can also access this feature by clicking the **Orient** button on the **Boards** tab of the *SMART Board Control Panel*.

To change the orientation precision

1. Click the **SMART Board** icon and select **Control Panel**.

   The *SMART Board Control Panel* appears.
2. On the **Boards** tab, click the **Advanced** button.

   For Mac OS X computers, the *Edit Advanced Settings* dialog box appears.

   For Mac OS 9.x computers or earlier, the *Pick the Orientation Precision* dialog box appears after you click the **Orient** button. Proceed to step 4.

   For Windows operating systems, select **Board Settings** from the shortcut menu that appears.

   The *Edit Advanced Board Settings* dialog box appears.
3. Click the **Pick the Orientation Precision** tab.
4. Select the Orientation level you prefer.
5. Click the **Apply** button, and then **OK** (or **Next** for Mac OS 9.x computers or earlier).
6. Click the **Orient** button.
7. Follow the on-screen instructions. Press on each cross that appears with your finger or stylus at a 90° angle to the screen.

   IMPORTANT: Keep your finger straight as it approaches the screen. Press it firmly on each cross, and keep it straight as you pull it away from the screen.

8. Test the orientation by dragging your finger across the screen. The cursor should track your finger very closely and appear directly beneath the center of your fingertip.

Calibrating the Cameras (DViT Technology)

With DViT technology, small cameras that are located in the corners of the interactive whiteboard frame detect contact with the screen. For the screen to function properly, these cameras must be precisely calibrated so the computer can provide an accurate and appropriate response to screen contact.

You should re-calibrate the cameras (and orient the screen) if areas of the screen have inaccurate, erratic or absent touch sensitivity, or if the electronic ink that appears when you write on the screen is jagged, broken or doesn't appear at all.

To calibrate the cameras and orient the screen, access the **Advanced settings** of the SMART Board Control Panel on a computer running the Windows 98, 2000, ME, XP or Windows NT operating system, as described in the following procedure.

To re-calibrate the cameras

1. Press the **SMART Board** icon in the system tray, and select **Control Panel**.

   The SMART Board Control Panel opens.
2. On the **Boards** tab, press the **Advanced** button.

   The *Edit Advanced Board Settings* dialog box opens.
3. Press the **DViT Settings** tab.
4. Press the **Calibrate** button.

   The four-point calibration screen appears.
5. Press and hold your finger on the center of each target until the target moves.

   After you press the final target, a message appears, followed immediately by the orientation screen.
6. Complete the orientation procedure.
7. Press **OK**.

The 2000i is now ready for use.

Connecting a Guest Laptop

You can connect and control a laptop presentation by touching the screen *only* if you:

- purchase and install the X-Port 20 switch option for the 2000i
- install SMART Board software on the laptop

The X-Port 20 unit is an RS-232 serial switch for establishing a serial connection with the laptop, enabling the laptop user to both write over top of the displayed laptop image with a pen tray stylus and control the contents of the laptop by touching the screen. In addition, it allows you to switch between the laptop, the resident computer and a VCR/DVD player using the Control Panel at the front of the 2000i. If a guest laptop requires a USB connection to the 2000i, purchase the optional USB-ADP cable from SMART Technologies to convert USB to serial.

Complete instructions for installing the X-Port 20 switch and connecting a guest laptop are in the *X-Port 20 Switch Installation Guide* that comes with the X-Port 20 option kit.

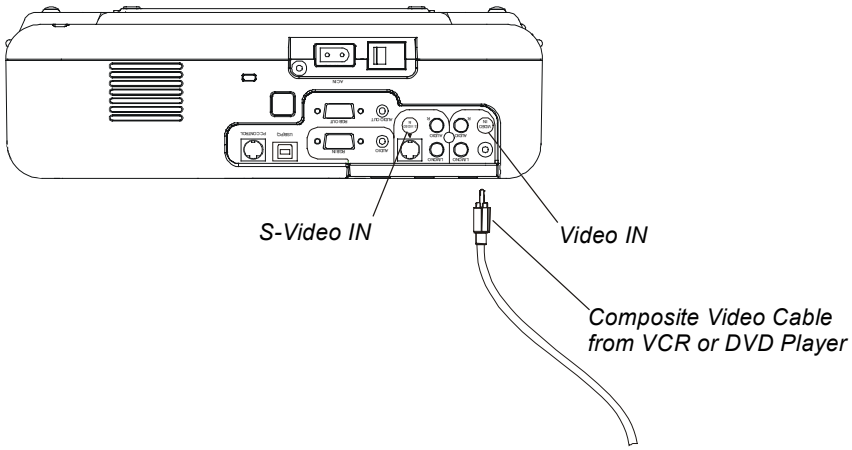
Connecting a VCR or DVD Player

You'll need the following cables to connect a VCR or DVD player to the 2000i:

- an RCA composite video cable or an S-video cable
- standard red and white RCA stereo audio cables

To connect a VCR/DVD player to the 2000i

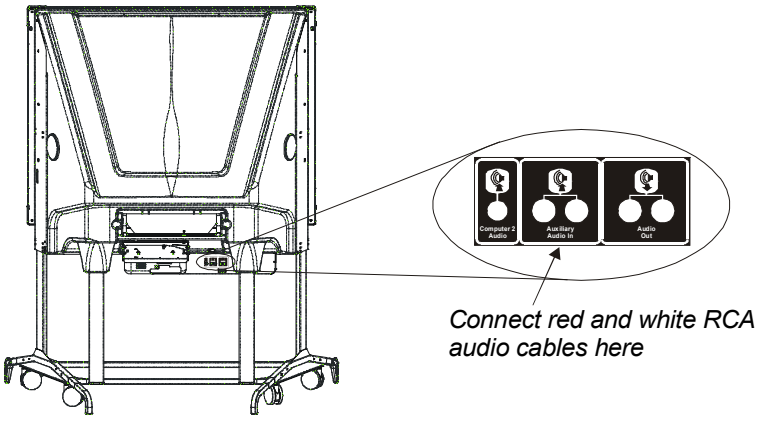
1. Power down the projector.
2. Connect the yellow RCA video connector on an RCA composite video cable (not provided) to the **Video Output jack** on the VCR/DVD player. This jack may be labeled "To Monitor".
3. Plug the other end of the cable into the **Video IN** connector on the projector.



Connecting the Video Cable from the VCR/DVD Player to the Projector

NOTE: If you're using an S-video cable, connect it to the **S-video Out** connector on the VCR/DVD player, and then plug the other end directly into the **S-video IN** connector on the projector.

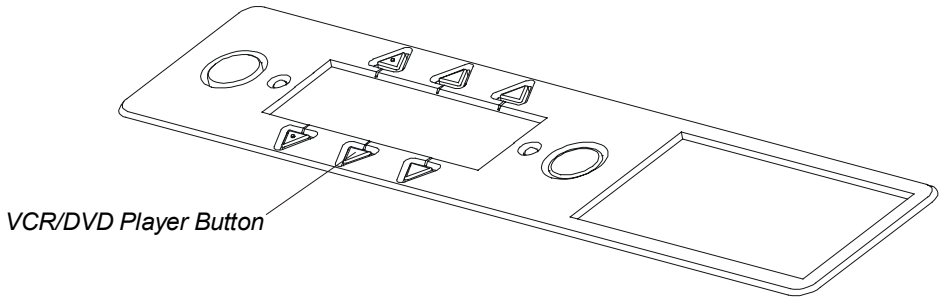
4. Connect standard red and white RCA stereo audio cables (not provided) from the **RCA Audio** outputs on the VCR/DVD player to the two **Auxiliary Audio IN** jacks on the rear of the 2000i. Keep your right and left channel connections correct for stereo sound.



Connecting the Audio Cables

NOTE: You can't connect the audio cable from both a VCR and a DVD player using the RCA jacks because the Connection Panel can only accommodate one external audio source that uses RCA connectors at a time.

5. Connect the power cable to an available outlet or power bar (not supplied).
6. Turn on the projector.
7. Press the **VCR/DVD Player** button on the Control Panel.



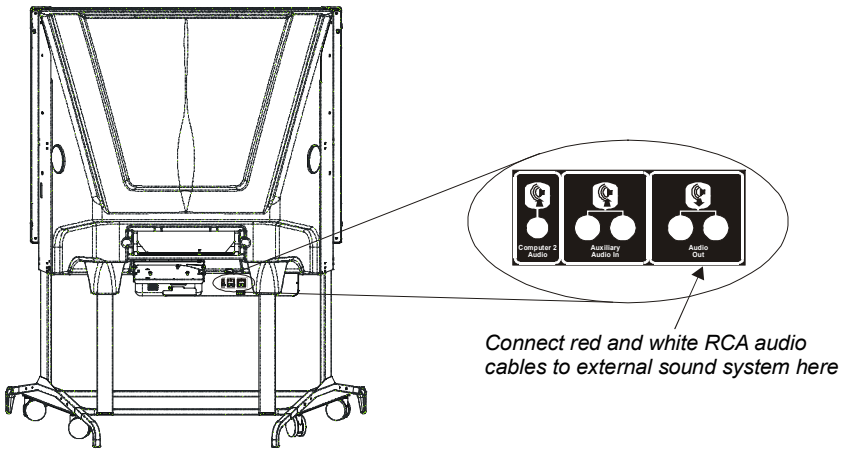
VCR/DVD Player Button in Control Panel

8. Turn on the VCR/DVD player and press the **Play** button.

Connecting an External Sound System

To deliver preamplified (or low level) sound to an external room sound system

Connect standard red and white RCA audio cables (not provided) from the **RCA Audio** inputs on the external sound system to the two **Audio OUT** jacks on the rear of the 2000i. Keep your right and left channel connections correct for stereo sound.



Connecting Audio Cables from an External Sound System

Connecting an External Monitor or Projector

To direct the RGB output from the host computer or guest laptop to an external projector or monitor

Connect an HD DB15 video cable (not provided) from the external projector or monitor to the **RGB OUT** port on the back of the projector. This connection is for RGB output only.

Basic Operations

This section shows you how to:

- Start up and shut down the 2000i (page 27)
- Adjust the height of the interactive whiteboard (page 30)
- Adjust the volume (page 31)
- Change the projector display source (page 32)
- Use the interactive whiteboard (page 33)

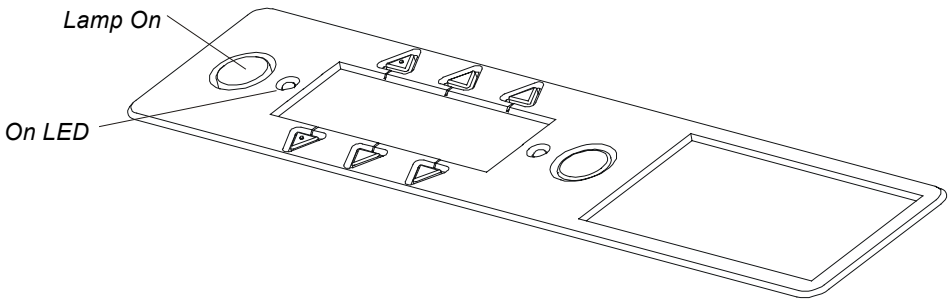
Starting Up the 2000i

You should keep the projector on at all times. However, to conserve the projector lamp, press the **Lamp Off** button on the Control Panel at the end of your session (or at the end of the day). For ease of operation, you should also keep the computer on all the time. By doing this, you can start up the 2000i by restoring power to the projector lamp (press the **Lamp On** button on the Control Panel) and then entering your user name and password at the logon screen.

NOTE: To preserve the computer's hard drive(s) and the projector lamp, you may want to put the computer hard drive and the monitor (interactive screen) into standby mode. Refer to page 11 for instructions.

To start up the 2000i

1. If the screen is black, press the **Lamp On** button on the Control Panel to power up the projector lamp. The On LED indicator should blink quickly for approximately 60 seconds, and then remain illuminated when the lamp is fully powered up.



2. If you see a logon screen, use the connected keyboard to enter your logon ID and password, and then press the **OK** button.

   OR

   If the screen turns from black to blue – and no logon screen appears – you may need to power up the computer or restore it from a standby setting. Turn the computer on, or press the reset button (if required).

See the next page for possible startup scenarios.

Startup Scenarios

If your 2000i is situated in a multi-user room, you may sometimes find the unit in a non-operational state. The following table describes what you may need to do to restore the 2000i to a fully operational state.

What You See	What You Should Do
• Screen is black • On LED is blinking intermittently (short flashes between long pauses)	The projector is in standby mode (with the lamp off). • Press the **Lamp On** button on the Control Panel. The On LED indicator blinks quickly as the lamp warms up, and, after approximately 60 seconds, either a blue "No Input" screen appears (see immediately below) or the screen is restored to its last active state.
• Blue "No Input" screen • On LED is steadily illuminated	The projector lamp is powered up, but the computer is either off or in standby mode, or you've selected an inactive display source. • Press a key on the connected keyboard to activate the computer. The logon screen appears. OR Press a source button on the Control Panel to change to an active source. **If the blue "No Input" screen remains:** 1. Turn the computer on (or press the computer's reset button). The logon screen appears. 2. Log on as usual (using the connected keyboard).
• Screen is black • On LED is blinking slowly	No action is necessary. The projector lamp is in the process of powering up, and the logon screen will appear after approximately 60 seconds.
• Screen is black • Off LED is blinking rapidly	The projector lamp is in reversible standby mode. If you don't press a button to instantly restore the image, after three minutes the LED indicator will blink slowly for 60 seconds as the lamp powers off and cools down. At this point, follow the first set of instructions in this table to restore the 2000i to an operational state.
• Logon Screen	The projector lamp is still on, so you can log on as usual (using the connected keyboard).
• Lamp On LED continues to blink intermittently, even though it's been pressed to start the system	Projector problems are preventing a normal projector lamp warm-up. Examine the projector status LED indicator, and then consult the troubleshooting section of the *NEC VT465 User's Manual*.
• The Off and On LEDs are both flashing constantly	The system can't detect a projector. Check the *NEC VT465 User's Manual* to make sure the projector is connected properly.

Putting the 2000i on Standby

For normal operation, you don't need to power down the computer or the projector at the end of a session or at the end of the day. Just log off the computer (for security) and then turn off the projector lamp (to conserve its life) by pressing the Lamp Off button on the Control Panel.

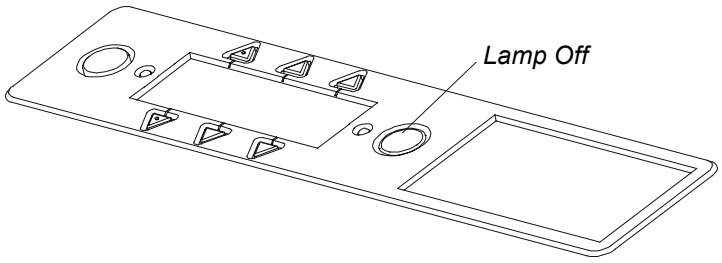
NOTE: If you won't use the 2000i for an extended period of time, you should power down the computer and the projector.

To put the 2000i on standby

1. Log off by selecting **Start > Shut Down**.

   NOTE: Logging off enhances system security. It also gives users a consistent initial interface – the system logon screen – when they power up the projector lamp.

2. Press the **Lamp Off** button to put the projector into *reversible* standby mode for three minutes.



Lamp Off Button on the Control Panel

   While the screen appears black, the projector lamp remains on so you can immediately restore the image (if necessary) by pressing any button on the Control Panel. After three minutes, the lamp powers off and cools down for 60 seconds.

   To skip the three-minute reversible period, press and hold the **Lamp Off** button for three seconds. Release the button and the lamp powers off and enters a 60-second cool down period.

   Perform this procedure at the end of a meeting or presentation and at the end of the day. If you prefer, you can also shut down the computer. However, we recommend simply logging off rather than powering down the computer.

To power down the projector (if unused for an extended period)

1. Log off (as described above) and power down the computer.
2. Press the **Lamp Off** button on the Control Panel.

   The Off LED indicator blinks rapidly for three minutes (reversible standby), and then slowly for approximately 60 seconds while the lamp cools down. When the lamp is off, the On LED indicator blinks very slowly.

   OR

   Press and hold the **Lamp Off** button for three seconds. The lamp immediately powers down and enters a 60-second cool-down period.

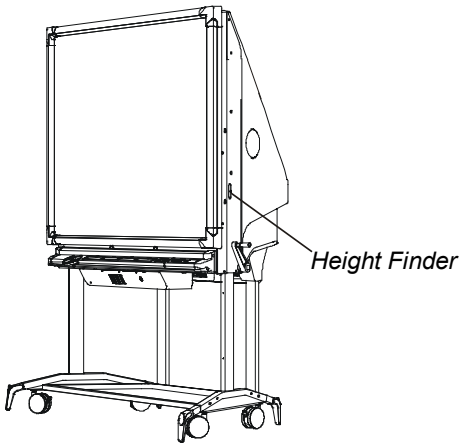
3. When the cooling fan stops, flip the power switch on the back of the projector.
4. Disconnect the 2000i power cable from the wall power outlet.

Adjusting the Height of the Interactive Whiteboard

It's easy to raise or lower the interactive whiteboard to accommodate users of different heights (even while the system is in operation), so anyone can comfortably touch or write on the screen. The 2000i has a height adjustment range of 14" (35.6 cm).

Turn the handle to adjust the top of the screen from a lower limit of 69" (175.3 cm) from the floor to a maximum height of 83" (210.8 cm) from the floor. When you reach the top and bottom limits of the adjustment range, you can't turn the handle any further.

To gauge the height of the unit as you turn the height adjustment handle, or to adjust it to a particular height, watch the height finder that is located on the side of the unit, just above the handle.

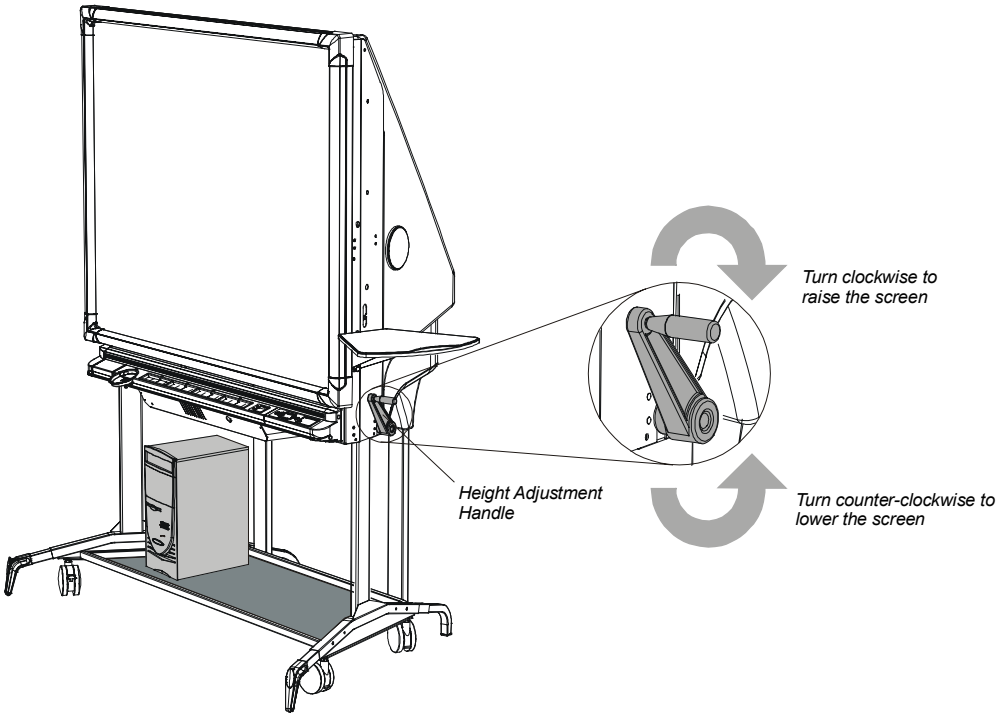


Location of the Height Finder

NOTE: If the computer on the storage tray is unusually tall, be careful not to lower the interactive whiteboard on top of it.

To raise the screen

Turn the height adjustment handle in a clockwise motion to raise the screen. The maximum height is 83" (210.8 cm).



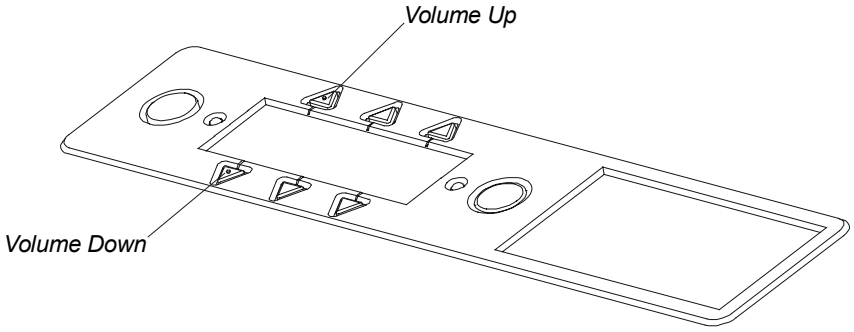
Adjusting the Screen Height

To lower the screen

Turn the height adjustment handle in a counter-clockwise motion to lower the screen. The minimum height is 69" (175.3 cm) from the floor. Be careful not to lower the unit on top of your computer.

Adjusting the Volume

Volume adjustments are made for the active display source, and are made independently of other sources. When you switch to another input source, the 2000i retains settings you made for the first input source (for when you switch back).



To adjust the volume

1. Press and hold the **Volume Up** (**+**) button on the Control Panel to increase the volume for the current source.

2. Press and hold the **Volume Down** (🔊 –) button on the Control Panel to decrease the volume for the current source.

To restore default volume level (no sound)

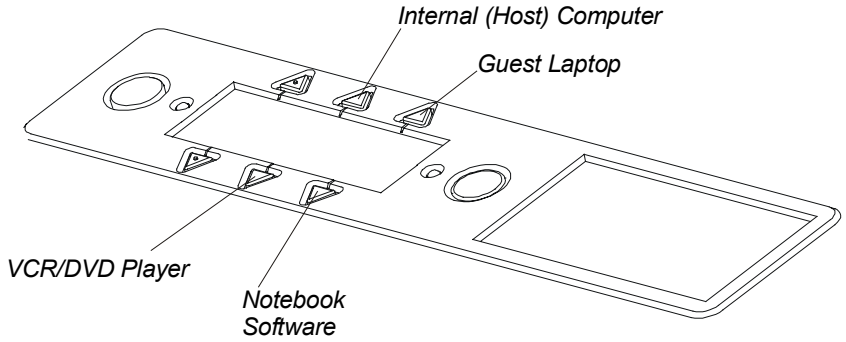
Press and hold both **Volume** buttons simultaneously.

To fine-tune the projected image

When you first connect the projector, you may need to fine-tune the image. To automatically optimize the image in RGB mode, press the **Auto Adjust** button on the projector remote control. This will eliminate vertical banding, flickering, video noise, dot interference and cross talk.

Changing the Display Source for the Internal Projector

You can change the video and audio input source for the internal projector and cabinet audio amplifier using the three source buttons on the Control Panel. Choose from the host computer, a connected guest laptop or external computer (X-Port 20 option only) and a VCR or DVD player. When the internal computer source is active, you can also make Notebook software and the SMART Board tools instantly appear by pressing the Notebook software button on the Control Panel.



NOTE: Switching sources takes a few seconds, and, during that time, all buttons on the Control Panel are disabled.

To switch to the connected VCR or DVD player

Press the **VCR/DVD Player** button on the Control Panel.

NOTE: You can't use the **VCR/DVD Player** button to switch to a VCR or DVD player that's connected by an S-video cable. You can only switch to an S-video source with the projector remote control.

To switch to the internal computer

Press the **Internal Computer** button on the Control Panel.

To switch to a guest computer (X-Port 20 switch option only)

Press the **Guest Laptop** button on the Control Panel.

NOTE: You must have the X-Port 20 switch installed to switch to a connected guest laptop or external computer. For complete details regarding guest laptop connections and switching, see the *X-Port 20 Installation Guide,* which is included in the kit.

To switch to Notebook software

Press the **Notebook** button on the Control Panel.

NOTE: For Notebook software to appear, it must first be installed and running on the internal computer (see page 21). The internal computer source must also be the current active source. For information on using Notebook software, see *Using Notebook Software*, on this page.

To open Floating Tools

Press the **Notebook** button and hold for three seconds.

OR

Press the **SMART Board** icon and select **Floating Tools**.

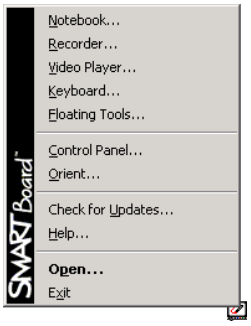
NOTE: For the Floating Tools to appear, SMART Board software must first be installed and running on the internal computer (see page 21) The internal computer source must also be the current active source. For more information on using the Floating Tools, see *Using the Floating Tools*, on page 34.

Using the SMART Board Interactive Whiteboard

After you install SMART Board software on the host computer, and then configure and orient the interactive whiteboard, you're ready to use the 2000i. To get the most from your interactive whiteboard, you should have both the SMART Board tools and Notebook software open and running.

SMART Board Tools

The SMART Board tools provide all the SMART Board functionality beyond basic touch control and pen tray button use. Specifically, the SMART Board tools provide you with annotation and tool-configuration capabilities, as well as video player, recorder, and the on-screen keyboard. It's important to note that the SMART Board tools must be running to use the pen tray styluses and eraser. In other words, if you want to write on your interactive whiteboard with a pen tray stylus, make sure the **SMART Board** icon appears in the system tray (Windows operating system) or menu bar (Macintosh computer).



SMART Board Tools

Using Notebook Software

Notebook software includes many object-creation tools that allow you to create a variety of annotations and import graphics, text, clip art and entire files from any other application into your Notebook file. But Notebook software is much more than just an electronic flip chart for displaying

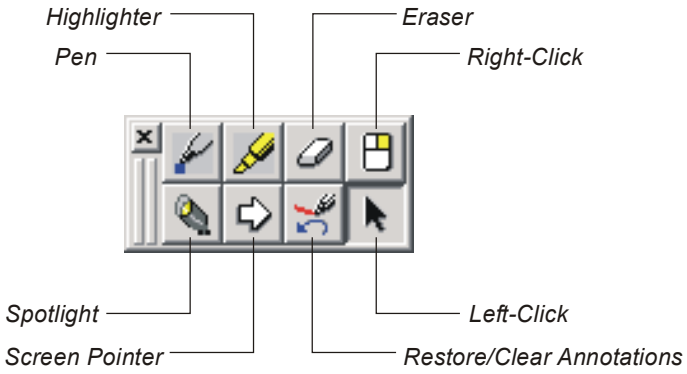
presentations or capturing notes in a brainstorming session. It also serves as a receptacle for anything you write on the interactive whiteboard *over any application.*

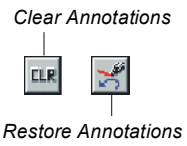
If you want to capture the annotations you make with a pen tray stylus over other programs, select **Screen Capture** from the **View** menu and then minimize the Notebook software window. A three-button Screen Capture toolbar will float on top of all your applications. You can now capture your annotation with a press of a button. Macintosh computer users can access the same annotation-capture capability from the **SMART Board Tools** menu. The captured image is automatically placed on a new page of the current Notebook file.

To write into Notebook software, leave the Notebook window open and maximized. If you want an even larger area for writing or brainstorming, select **Full Screen** from the **View** menu.

Using the Floating Tools

The Floating Tools are a virtual version of the pen tray tools. Press the Pen button, for example, and your next contact with the interactive whiteboard produces electronic ink. In addition, the default Floating Tools palette includes a number of tools that you won't find in your pen tray, such as tools for producing a right-mouse click, displaying a large pointer, producing a spotlight, capturing your annotations and restoring cleared annotations. You can edit the default palette of tools and save this customized palette in a user profile that you can activate each time you use the interactive whiteboard.





Two Buttons to Note: The Restore/Clear Annotations and Screen Capture Buttons

The Restore/Clear Annotations button is a great reason to keep the Floating Tools open. When you write something on the interactive whiteboard, the button is in its Clear Annotations state; as soon as you delete an annotation, the button changes to Restore Annotations.

Let's say you've written an important note, but your elbow grazes the interactive whiteboard as you turn towards your audience: the annotation you just made disappears. Just press the **Restore Annotations** button and your note reappears. If you haven't activated the Floating Tools, don't worry. Press the **SMART Board** icon, select **Floating Tools**, and then press the **Restore Annotations** button. The last cleared annotation – in this case, the one you accidentally lost – reappears.

Enabling/Disabling Multipointer Mode (DViT Technology)

When Multipointer mode is enabled, two people can write on the interactive screen simultaneously. After the first person picks up a pen tray stylus, the other person can use their finger to write in the same color.

To enable/disable Multipointer Mode

1. Press the **SMART Board** icon in the system tray and select **Control Panel**.



   The *SMART Board Control Panel* opens.
2. In the **Boards** tab, press the **Advanced** button.

   The *Edit Advanced Board Settings* dialog box opens.
3. Press the **DViT Settings** tab.
4. Select the **Enable Multipointer Mode** check box.

Maintenance

Cleaning the Interactive Whiteboard and other Components

Clean the interactive whiteboard surface on a regular basis. Otherwise, dust may build up, adversely affecting the operation of the 2000i.

Do not spray the glass cleaner directly onto the screen surface. Instead, spray it lightly on a cloth and then gently wipe. The 2000i uses digital cameras that are located inside the frame. If you allow excess glass cleaner to flow into the crack between the frame and the writing surface, the fluid could damage the cameras.

Before you clean the interactive whiteboard, log off the computer. If you touch the screen when the computer is in any other state (e.g., with a program open or at the desktop), you may activate program components or scramble desktop icons. After you log off, put the projector into standby mode so you can easily see dirt and streaks.

Remove marks made with a permanent marker by completely covering them with the ink from a dry-erase marker (*not* a low-odor marker). Then wipe with a soft cloth. Dry-erase ink contains solvents that work to remove permanent ink. If any trace of the original permanent ink remains, spray the area with standard glass or whiteboard cleaner and wipe clean.

The back of the interactive whiteboard screen is well protected from handling by its location on the inside of the unit. However, if it must be dusted, or if a mark has been made on its surface, dab it gently with a soft cloth that’s sprayed with standard, alcohol-free glass cleaner. Do not apply the cleaner directly to the surface.

Periodically dust the mirrors and unit components using a soft cloth. To clean the mirrors, use a standard, alcohol-free glass cleaner.

IMPORTANT: Do not, under any circumstances, apply *isopropyl alcohol, water or acetone* to the rear surface of the interactive screen. Any of these fluids could damage the diffusion coating, resulting in a permanent deterioration in display quality.

Cleaning the Projector

Before you clean the projector, unplug it.

Periodically clean the projector casing with a damp cloth. If it is heavily soiled you can use a mild detergent, but don't use strong detergent or a solvent, such as alcohol or thinner. Use a blower or lens paper to clean the lens, being careful not to scratch or mar the lens.

Cleaning the Filter and Clearing the Filter-Cleaning Message

Clean the air-filter sponge with a vacuum after every 100 hours of operation (more often in dusty conditions), as described on page E-31 of the *NEC VT465 User's Manual.*

A "Please Clean Filter" message from the projector will appear on the bottom of the screen after every 100 hours of operation. However, after cleaning the filter this message will not automatically disappear, so you must use the projector remote control to clear the filter usage meter, as follows:

1. Press the **Menu** button on the projector remote control.
2. Select **Default > Clear Filter Usage**.

The meter returns to zero. You won't receive another "Please Clean Filter" message for another 100 hours.

Replacing the Projector Lamp and Filter

Replace the lamp when you see this message: "The lamp has reached the end of its usable life. Please replace the lamp." To do this, order the NEC VT60LP standard lamp, which is available from NEC or SMART. Do *not* use any other lamps.

In general, you should replace your projector lamp after 2000 hours of normal mode operation or 3000 hours of eco-mode operation, as the projector will turn off automatically and go into standby mode after 2100 hours (normal mode) or 3100 hours (eco mode).

To find out how many hours of lamp use remain, go to the projector menu (press the **Menu** button on the remote control or projector) and select **Information > Page3 > Remaining Lamp Time**. Replacing the used lamp with a new lamp automatically clears the lamp usage hours. When you replace the projector lamp, you should also replace the projector filter, which you'll automatically receive with the replacement lamp.

You'll find instructions for replacing the lamp on page E-30 in the *NEC VT465 User's Manual*.

WARNING



After you turn off the projector, allow at least one minute to elapse before you unplug it. *Do not* touch or replace the projector lamp (which will be very hot) for at least an hour.

Après avoir éteint le projecteur, attendez au moins une minute avant de le débrancher. Attendez *au moins une heure* avant de toucher ou de remplacer la lampe du projecteur (qui sera très chaude).

Stecken Sie den Projektor für mindestens eine Minute nach dem Abschalten nicht aus. Berühren oder ersetzen Sie die Projektorlampe (die sehr heiß sein wird) *nicht* vor Ablauf einer Stunde.

プロジェクターの電源を切った後、最低でも 1 分間はプロジェクターのプラグを抜かないでください。プロジェクターのランプは非常に熱くなりますので、最低でも 1 時間は触ったり交換したりしないでください。

CAUTION



Never touch the back of the screen or brush against it with your head while you're examining internal unit components. If you do smudge this surface, lightly spray alcohol-free glass cleaner onto a soft cloth and lightly dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

WARNING



To avoid an electric shock, do not remove any screws except the two lamp-case screws.

Pour éviter tout risque de choc électrique, ne retirez aucune vis, à l'exception des deux vis d'accès aux lampes.

Para evitar descargas eléctricas, no quite ningún tornillo excepto los de las dos lámparas.

Um einen elektrischen Schlag zu vermeiden, dürfen Sie mit Ausnahme der beiden Lampengehäuseschrauben keine Schrauben entfernen.

感電の恐れがありますので、ランプ ケースの 2 つのねじ以外に、ねじは取り外さないようにしてください。

Customer Support

Contacting SMART Technical Support

SMART's Technical Support team welcomes your call. However, you may first want to contact your local reseller if you experience any difficulty with your 2000i, as they may be able to solve the problem without delay.

All SMART products include free telephone, fax and e-mail support.

Telephone: 1.866.518.6791 (toll-free in Canada/U.S) or +1.403.228.5940 (all other countries)
(Available 7 a.m. – 6 p.m. Mountain time from Monday to Friday)

Fax: +1.403.802.1256

E-mail: support@smarttech.com

Web Site: www.smarttech.com/support

When you phone Technical Support, it will be helpful if you have access to your 2000i during the call. The support representative may ask you for the following information:

- the serial number of the unit
- the version of the software that's causing the problem and the version of your computer's operating system (if applicable)

General Inquiries

Main Switchboard: 1.888.42.SMART (toll-free in Canada/U.S.) or +1.403.245.0333 (all other countries)

Fax: +1.403.228.2500

E-mail: info@smarttech.com

Address: SMART Technologies Inc.
Suite 600, 1177 – 11th Avenue SW
Calgary, AB CANADA T2R 1K9

Returning Defective Merchandise

All *Rear Projection* SMART Board 2000i interactive whiteboards are covered by a one-year limited equipment warranty. The integrated project is covered by a two-year limited equipment warranty. To return defective merchandise, call SMART Technical Support. You will receive the appropriate Return of Merchandise authorization and instructions for transporting your 2000i to an authorized service center.

Warranty Shipping Charges

Transportation charges that are incurred from warranty service are paid as follows: You are responsible for transporting the system to the service center, and SMART pays return shipping via ground service on any product that's returned for service within the warranty period. If you request a *rush order*, any associated charges are billed to you. Read the warranty that was included with your 2000i for details.

NOTE: After the warranty period, you are responsible for transporting the product to and from the service center.

Registration

A User Registration card was included with your 2000i. To help us serve you, fill in and mail this card to SMART Technologies Inc. or register online at www.smarttech.com/registration.

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