Installation Guide

Sympodium®DT770



SMART Technologies

Interactive Pen Display

Registration Benefits

In the past, we've made new features available as free software upgrades. Register your SMART product to be notified of free upgrades.

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

Serial Number

Date of Purchase

Register online at www.smarttech.com/registration

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U.S. Patent Nos. 5,448,263; 6,141,000; 6,326,954; 6,337,681; 6,741,267; 6,747,636; 6,803,906; 6,919,880; and 6,947,032. Canadian Patent No. 2,058,219. Other U.S., Canadian and foreign patents pending.

WARNING If the screen is damaged, don't touch any liquid that leaks from it. This liquid is an irritant. If the liquid makes contact with your skin, eyes or mouth, immediately rinse the area with running water for at least 15 minutes. Consult a physician if the liquid makes contact with your eyes or mouth.



Don't open or disassemble the Sympodium® DT770 interactive pen display. You risk electrical shock from the high voltage inside the casing. Also, if you open the casing, you void your warranty.



Don't use the DT770 in a facility control system or any other environment that requires extremely high reliability; the DT770 can interfere with or cause other electronic devices to malfunction, or other wireless devices can interfere with or cause the DT770 to malfunction. Where use is prohibited, turn off the DT770 to prevent the possibility of it interfering with or causing other electronic devices to malfunction. SMART doesn't accept any liability for direct or consequential damages.

CAUTION

Only use the power adapter that came with the DT770, because other adapters won't work properly, can damage the DT770, and can create a fire hazard. If you use a different power adapter, you'll void your warranty.

CAUTION



Take care not to scratch, mark or otherwise damage the cameras and optical components in the front of the DT770.

CAUTION



Don't touch the interactive screen with sharp, metallic objects that could scratch the screen's coating.

CAUTION

The tethered pen is a sealed unit that contains electronics but no batteries. If you attempt to open the tethered pen, you'll damage these electronics. This will make the tethered pen unusable and void the warranty.

CAUTION

If you transport the interactive pen display 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. Do not include loose components in the packaging that could mark, scratch or otherwise damage the interactive screen during the journey.

Other Precautions

For proper installation, read this guide carefully and observe the following precautions.

- Don't place sharp or heavy objects on the DT770.
- Turn off your DT770 and shut down your computer before connecting any cables. Otherwise you can damage the DT770 or your computer.
- Don't set the resolution of the DT770 to greater than 1280 × 1024.
- Don't block the DT770's ventilation holes. Doing so can cause the DT770 to overheat.
- If you move the DT770, hold it on the sides or the back. Don't apply pressure to the screen.
- Avoid setting up and using the DT770 in an area with excessive levels of dust, humidity and smoke or where it's exposed to direct sunlight, severe temperature changes, heat from other appliances, water or any other liquid. Operate the DT770 in an environment with a temperature range between 41°F and 95°F (5°C to 35°C) and with a humidity range of 20% to 80% (non-condensing). However, you can store the DT770 in an environment with a temperature range of -4°F to 140°F (-20°C to 60°C) and a humidity range of 20% to 80% (non-condensing).
- Don't modify the power cord. Handle it carefully and avoid bending it excessively. Don't place the power cord in an area where it's likely to be stepped on or pinched by items placed on or against it. If you must run a cable over the floor, lay it flat, in a straight line, and secure it to the floor with tape or a cable management strip of contrasting color.
- Your DT770 comes with a power plug that works with your country's power outlets. If the power plug is a three-prong, grounding-type power plug (designed to fit into a grounding-type power outlet) and you're unable to insert the plug into the outlet, contact an electrician to replace the outlet. Don't modify the power plug.
- If possible, unplug the DT770 before any thunderstorms. However, don't touch the unit or the unit's power plug during a thunderstorm, as there is a risk of electrical shock.
- Unplug the DT770 if you won't use it for an extended period.
- Don't hit or drop the DT770 or subject it to intense shock or vibration.
- If the DT770 requires replacement parts, use parts that are specified by SMART Technologies Inc.

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The Sympodium® DT770 interactive pen display works with your computer and SMART Board[™] software to create an interactive presentation environment. The DT770 includes dynamic and interactive tools for creating presentations and lessons. You can control applications and create notes using your finger or the tethered pen, all while facing the audience.

The DT770 interactive pen display is a 17" (43.2 cm) LCD interactive screen. The DT770 uses Dual-touch, DViT[™] (Digital Vision Touch) technology to detect the location of either your finger or the battery-free, tethered pen.



On the frame of the DT770, you'll find:

- the main Power button for the DT770
- two light emitting diodes (LEDs) that indicate the DT770's power and status
- four function buttons that provide immediate access to specific SMART Board tools, such as Notebook™ software and the Floating Tools
- seven pen tool buttons you can use to left-click, right-click, and to create and remove digital ink
- · four display control buttons, which give you access to the screen's display settings
- a room control interface button, which gives you access to room control interface menus (room control system not supplied)
- a magnetic pen recess where you can store the pen when it's not in use

• a USB 2.0 high speed hub to which you can connect a USB memory storage device

This guide describes how to install and use the DT770 with your computer and integrate the DT770 with a projector or monitor. For information on using SMART Board software, refer to the *SMART Board Software User's Guide* and the SMART Board software online Help. While reading the *SMART Board Software User's Guide* and the online Help, keep in mind that the DT770 works like a projected SMART Board interactive whiteboard in the following ways:

- a touch on the DT770 with a finger is equivalent to a touch on the interactive whiteboard with a finger
- the DT770's tethered pen (when used with the pen tool buttons) functions like the interactive whiteboard's pen tray pens
- the DT770's function buttons behave like the interactive whiteboard's control panel buttons

Interactive Screen

The interactive screen tracks the position of objects, such as the tethered pen or your finger. This screen acts as both an input device and an output device.

Tethered Pen

You can use the tethered pen to control and manipulate items on your screen and to create or remove digital ink.



You can't use your finger and the tethered pen at the same time. If the pen is in its pen recess, the DT770 detects contact between any object and the interactive screen. However, if you remove the pen from the pen recess, the DT770 detects contact between the pen and interactive screen but ignores any other contact.



NOTE: For the DT770 to interpret the location of the tethered pen, the connected computer must be running SMART Board tools. You'll know that SMART Board tools are running if you can see the SMART Board icon in the system tray or the Dock.



Don't touch the interactive screen with sharp, metallic objects that could scratch the screen's coating.

Pen Tool Buttons





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The pen tool buttons in the top-middle of the DT770's frame include:

- the Pointer button (also left-click)
- the Black, Blue, Red and Green digital ink buttons
- the Eraser button
- the Right-Click button

For information on the pen tool buttons, see page 16.

Function Buttons



The function buttons in the top-left of the DT770 give you quick access to:

- screen capture tools
- the SMART Keyboard
- Notebook software
- Floating Tools

For information on the function buttons, see page 18.

Display Control Buttons



You can configure the display settings using the display control buttons in the top-right of the DT770. For information on adjusting the display settings, see page 29.

Room Control Interface Button



You can open room control interface menus using the button in the top-left of the DT770 (room control system not supplied).

Connection Panel



The DT770 connection panel includes:

- a type B USB connector for communication with a computer
- a two-port type A USB hub for connecting other USB devices, such as a mouse or keyboard
- an HD DB15 video input port for connecting the video cable from your computer
- an HD DB15 video output port for connecting a video cable to a projector or a monitor
- a connector for the tethered pen
- an RS-232 serial port for communication with a computer or control system
- a power connector for the power cable

There is also an additional type A USB port on the right side of the DT770's frame for connecting other USB devices.

NOTE: When you initially receive your DT770, the connection panel is inaccessible because of a protective cover. You can remove this cover using the supplied screwdriver.

Power Supply

The Sympodium DT770 interactive pen display uses a single 12V DC power supply, which comes with an appropriate, country-specific power cable to connect to a power outlet.

NOTE: The power input is designed for both 120V AC and 220V AC operation. However, you'll never need to adjust the voltage as the DT770 switches to the appropriate voltage automatically.

The Power and Status LEDs

The two light emitting diodes (LEDs) in the top-right of the DT770 provide an indication of its power and status:

• the Power indicator is illuminated and green when the DT770 is turned on

• the Status indicator is illuminated and green when the DT770 is communicating with SMART Board software correctly



For information on the Power and Status indicators, see page 25.

Mono Stand

If you want to mount the DT770 at an angle of 30° or 45° degrees, you can install the DT770 on the supplied mono stand.



NOTE: You will receive the mono stand in a separate box from the DT770 interactive pen display.

Installing the DT770

This chapter tells you how to:

- determine the best location for the DT770 (this page)
- remove the connection panel's back cover (page 8)
- connect the DT770 (page 8)
- integrate a monitor or a projector (page 9)
- connect the tethered pen (page 9)
- reattach the connection panel's back cover (page 10) (optional)
- mount the DT770 on a Mono Stand (page 11) (optional)
- secure the DT770 (page 12)
- turn on the DT770 (page 12)
- install SMART Board software (page 12)
- match your computer's resolution setting to that of the interactive screen (page 13)
- orient the screen (page 14)

CAUTION

Turn off your DT770 and shut down your computer before you connect any cables. Otherwise you may damage the DT770 or your computer.

NOTE: For information on adjusting the screen settings, see page 29.

Determining the Best Location for Your DT770

When you're deciding where to place your interactive pen display, consider the location of the computer and its components in relation to the DT770.

Install the DT770 in a cool, dry location without excessive levels of dust, humidity and smoke. Operate the DT770 in an environment with a temperature range between 41°F and 95°F (5°C to 35°C) and with a maximum humidity of 80% (non-condensing). You can store the DT770 in an environment with a temperature range of -4°F to 140°F (-20°C to 60°C).

NOTE: Take into consideration that the DT770 itself will generate heat whenever it's turned on. To maintain a consistent operating temperature, don't block or cover any of the ventilation holes on the back of the unit. Other external factors can affect the DT770, such as the heat generated by control systems or other electronic equipment. Ensure there is adequate airflow around the DT770.

Keep the computer keyboard and the mouse close to the DT770, as the tethered pen won't function until you install SMART Board software and open SMART Board tools.

Removing the Connection Panel's Protective Cover

When you initially receive your DT770, the connection panel is inaccessible because of a protective cover.

To remove the protective cover

1. Place the DT770 facedown on a flat surface.



2. Loosen the captive screws in the protective cover with the supplied screwdriver.



- 3. Pull the cover away from the connection panel.
- 4. Put the cover somewhere safe. You may wish to reattach it after you have connected the DT770's cables.

Connecting the DT770

Complete the following procedure to connect the DT770 to your computer.

NOTE: For best results, use a computer with a video card that supports SXGA resolution (1280 × 1024), and set the refresh rate to 60 Hz or 75 Hz. If you use a video card that supports lower resolutions only, this may affect image quality. Don't set the resolution of the DT770 to greater than 1280 × 1024 (SXGA).

To connect the DT770

1. If you haven't already done so, shut down your computer.

2. Connect the supplied VGA (RGB) video cable to the Analog RGB IN port on the DT770.



- 3. Connect the other end of the video cable to the monitor port on the computer.
- 4. Connect the supplied USB cable to the **USB** type B connector on the DT770. Connect the other end of the cable to an available USB port on your computer.

NOTE: As an alternative, connect the supplied RS-232 cable to the **Serial** port on the DT770. Connect the other end to an available serial port on your computer.



Connect the DT770 to your computer using either the USB cable or the RS-232 cable. Don't connect both cables.

5. Connect the power cable to the power supply. Connect the power supply to the **12VDC IN** port on the DT770 and plug the power cable into an outlet.

Integrating a Monitor or a Projector

If you connect a projector directly to the DT770, you can project whatever the DT770 displays. If you connect a monitor directly to the DT770, you can display the same image on the monitor and the DT770.

To connect a projector or monitor to the DT770

- 1. Connect a VGA (RGB) video cable (not supplied) to the **Analog RGB OUT** port on the DT770.
- 2. Connect the other end of the video cable to a video input port on your projector or monitor.

For more information, refer to the instructions that came with your projector or monitor.

Connecting the Tethered Pen

You must attach the pen to the DT770 by connecting the pen's tether to the DT770's connection panel. This tether provides the power to the pen and the pen indicator.

To connect the tethered pen to the DT770

- 1. Connect the pen's tether to the **Pen Tether** port.
- 2. Thread the tether through the cable management clips on the underside of the DT770 to ensure that the tether is tidy and appropriately positioned for when you use the pen.

NOTE: You can thread the pen's tether towards the bottom or the side of the DT770.

3. Place the pen in the recess below the interactive screen so that it's available for use. The recess holds the pen magnetically.



Reattaching the Connection Panel's Protective Cover

If you wish, after you have connected all of the DT770's cables, you can reattach the protective cover.

To reattach the protective cover

1. Feed the cables through the semi cylindrical channel in the back of the DT770 so that when you reattach the protective cover, it will not trap any of the cables. Then place the cover over the connection panel.



2. Tighten the captive screws using the supplied screwdriver.

Mounting the DT770 on a Mono Stand

If you want to mount the DT770 at an angle of 30 or 45 degrees, you can install the DT770 on the supplied mono stand.



NOTE: You can purchase and install the optional tilt stand from SMART and adjust the DT770 to a variety of angles. As an alternative, you can purchase and install a tilt stand or mounting arm that conforms to the 100 mm pattern set by the Video Electronics Standards Association (VESA). If you install a VESA-compatible stand, ensure that the weight rating of the arm can support the DT770. Use M4 screws (with a 0.7 mm pitch), and select a screw length that ensures no more than 10 mm of the screw is threaded into the mounting plate.

To install the DT770 on the mono stand

1. If you have not done so already, place the DT770 facedown on a flat surface.



Place the DT770 down slowly and carefully to ensure you don't damage the buttons.

Don't place the DT770 on a surface that will mark, scratch or damage the screen or its optical components.

- 2. Loosen the four captive screws in the mono stand.
- 3. Align the captive screws in the mono stand with the four holes on the back of the interactive pen display.



If you want the DT770 to be on a 30° angle, align the mono stand so the vertical part of the stand is near the top edge of the DT770.



If you want the DT770 to be on a 45° angle, align the mono stand so the vertical part of the stand is near the bottom edge of the DT770.

- 4. Tighten the four captive screws.
- 5. Place the DT770 face up, with its weight on the mono stand and the bottom edge of the DT770.

Securing the DT770

You can secure the DT770 by attaching a cable (not supplied) between an immovable object and the Kensington® cable and lock device that's built into the back of the unit.

Turning on the DT770

Press the **Power** button in the top right of the DT770.



Press the **Power** button again to turn off the DT770.

Installing SMART Board Software

You can install SMART Board software on your computer from the provided SMART Board software CD. For complete details on installing and using this software, refer to the *SMART Board Software User's Guide* that came with your DT770.

To install SMART Board software

- 1. If you haven't already done so, turn on the computer and the DT770.
- 2. Close all open applications on the computer.
- 3. Insert the SMART Board software CD into your CD drive.

The CD starts automatically. Follow the on-screen instructions.

NOTE: You'll need to use the computer's keyboard or mouse to perform the installation, as your interactive pen display is not touch sensitive until you install and open SMART Board tools.

If the CD doesn't start automatically:

- (Windows operating systems) select Start > Run and enter x:\autorun.exe (where x: is your CD drive)
- (Mac computers) open your CD drive and double-click the installation file.

NOTE: If SMART Board software doesn't recognize the DT770, activate the port manually using an attached keyboard or mouse. For more information, refer to the SMART Board software online Help. Also, if the DT770 is your secondary monitor, enable it. For further information, refer to the instructions that came with your computer.

Since you must have SMART Board tools running to use the DT770, select the option to start SMART Board tools automatically when you start your computer. You'll know SMART Board tools are running if you can see the SMART Board icon in the system tray or the Dock.

4. After you've installed the software, touch the interactive screen with your finger or the tethered pen. The pointer appears underneath your finger or the tip of the pen.

NOTE: If the pointer doesn't appear beneath your finger or the tip of the pen, orient the screen (see below). If this doesn't improve the pointer's accuracy, refer to the *Troubleshooting* section of this guide (page 25).

Matching the Screen and Computer Resolutions

For best results in most circumstances, set the computer's resolution to match the DT770's native resolution of 1280×1024 (SXGA) and set the computer's vertical refresh rate to 60 Hz or 75 Hz. You must use the mouse to do this.

However, if your DT770 is connected to a Mac computer, and you see a black border at the top and bottom of the DT770's interactive screen, try a number of different resolutions to determine which one produces the best results.

Also, if you're integrating the DT770 with a projector, you must set your computer's resolution to match the projector's resolution. For example, if your projector supports XGA (1024 x 768) but not SXGA (1280 x 1024), set your computer's resolution to XGA.

NOTE: Don't set the resolution of the DT770 to greater than 1280 × 1024 (SXGA).

To set the resolution for the Windows operating system

- 1. Open the Windows Control Panel.
- 2. Press Display.

The Display Properties dialog box appears.

- 3. Press the **Settings** tab.
- 4. Move the slider to change the pixel setting to **1280 × 1024**.
- 5. Press OK.

To set the resolution for the Mac OS X operating system

- 1. Press the **System Preferences** icon in the Dock.
- 2. Press **Displays**.
- 3. On the Display tab of the *Monitors* dialog box, press **1280 × 1024**.
- 4. Close the dialog box.

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Orienting the Screen

To ensure that the pointer appears directly beneath your finger or the tethered pen when you touch the DT770's interactive screen, the computer needs to know the exact location of the image on the screen. You can ensure the accuracy of the pointer by orienting the screen, which requires you to touch a grid of red targets precisely using the tethered pen. Use the Quick (4 Points) orientation level.

NOTE: If the image on the screen is distorted, match the resolution (see below) and adjust the screen (page 29) before you orient the screen.

To change the orientation level to Quick (4 Points) (Windows Operating Systems)

- 1. Press the **SMART Board** icon in the system tray, and press **Control Panel**.
 - 2. Select SMART Board Settings.

The SMART Board Settings dialog box appears.

- 3. From the Hardware Info & Settings list, select Alignment/Orientation Precision.
- 4. Press Quick (4 points).
- 5. Press OK.

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To change the orientation level to Quick (4 Points) (Mac Computers)

- 1. Press the **SMART Board** icon in the Dock, and press **Open Control Panel**.
 - 2. Press Advanced.
 - 3. Press the Pick Orientation Precision tab.
 - 4. Select Quick (4 Points).

To orient the screen

1. (Windows operating systems) Press the **SMART Board** icon in the system tray, and press **Orient**.

(Mac computers) Press and hold the SMART Board icon in the Dock, and press Open Orient.

2. Follow the on-screen instructions.

For more details, see the SMART Board Software User's Guide for your operating system.

The Sympodium DT770 interactive pen display is as easy to use as a pen on paper. By touching your finger or the tethered pen to the screen, you can interact with computer applications intuitively. In addition, you can access additional tools and features using the pen tool buttons and function buttons. This chapter tells you how to interact with the screen using your finger or the tethered pen, as well as how to use the pen tool and function buttons.

NOTE: You can use SMART Board software to make your presentations interactive and dynamic. For further information on what you can accomplish with SMART Board software, refer to the *SMART Board Software User's Guide* or the online Help.

This chapter also includes information about customizing pen tool buttons and changing the DT770's default settings.

Touching the Interactive Screen

You can manipulate objects, select items, and create and remove digital ink by touching the screen with your finger or the tethered pen.

NOTE: You can interact with the screen only if SMART Board tools are running on the computer. You'll know SMART Board tools are open if you can see the SMART Board icon in the system tray

To use the tethered pen, lift it from the pen recess below the interactive screen, press the required pen tool button and touch the screen with the tip of the pen. The different pen tool buttons are discussed on the following pages.

When you lift the pen from the pen recess, the tethered pen indicator illuminates until you return it to the pen recess.



When you're not using the tethered pen, place it in the recess on the front of the DT770, where it's held in place magnetically.



NOTE: If you place the pen in the recess and the indicator still glows, move the pen from side to side until the indicator stops glowing. The DT770 can detect objects other than the tethered pen (such as your finger) only when the pen is correctly in the recess and the indicator is off.

To use your finger, ensure that the tethered pen is in the pen recess and that the pen's indicator is off. Then press the required pen tool button and touch the screen with your finger.

Using the Pen Tool Buttons

Use the pen tool buttons to control how the DT770 responds to your screen presses. You can use the pen tool buttons to left-click (sometimes referred to as Mouse mode), right-click, write digital ink (in black, blue, red or green) or erase when you press the screen.



Clicking and Mouse Mode

When you press the **Pointer** pen tool button, each screen press is interpreted as a left-click until you press a different pen tool button.

Press the **Pointer** button and then press your finger or the tip of the tethered pen on the interactive screen to activate an object. To double-click, press twice with your finger or the tethered pen. To drag an object, press and hold it with your finger or the tip of the tethered pen and drag it to its new location.

IMPORTANT



TIP

If the pointer doesn't appear directly under your finger or the tip of the tethered pen, orient the interactive pen display to improve the accuracy (page 14).

Right-Clicking

When you press the **Right-Click** pen tool button, the next contact with the interactive screen is interpreted as a right-click. With the next contact, the previous touch behavior is restored.

For example, if you're writing with black digital ink and then you press the **Right-Click** button, the next contact with the screen is a right-click, and each successive contact will be black digital ink.

NOTE: You can customize the **Right-Click** button on the DT770 to perform a different function (page 20).

Writing on the Screen and Saving Your Notes

When SMART Board tools are running on a connected computer, you can use the DT770's **Digital Ink** pen tool buttons to create notes over any computer application.



To create notes, press one of the **Digital Ink** pen tool buttons and write or draw on the screen, just as you would write or draw on paper. As you do so, a stream of digital ink follows your finger or the tethered pen.

NOTE: You can write notes over computer applications only if SMART Board tools are running on the computer. You'll know SMART Board tools are running if you can see the SMART Board icon in the system tray or the Dock.

You can change the properties of the digital ink, including its color, line thickness, line style and transparency. For more information, refer to the SMART Board software online Help.

When you write over an application, you can save the note. However, the available save options depend on whether that program is Aware (sometimes referred to as Ink Aware). An Aware application recognizes a note as a program component, but a non-Aware application doesn't.

NOTE: If you're using the Windows version of SMART Board software, you can access a complete list of Aware applications by selecting **Ink Aware Application Settings** in the *SMART Board Control Panel*.

To save your note as part of the file in an Aware application, save the file as you normally would. In some Windows applications, such as Microsoft Word and Excel, you can select additional toolbar options, such as saving your note into a Notebook file or saving your note as text.

If your DT770 is connected to a computer with a Windows operating system, you can capture your note and the application background and save them into a Notebook file for both Aware and non-Aware applications Select the required option from the Capture toolbar to capture a specific area, a window or the entire screen.

NOTE: If the Capture toolbar doesn't appear automatically, you can open it by pressing the **Screen Capture Tools** button on the DT770.

Screen Capture Tools button on the DT770.

If your DT770 is connected to a Mac computer and you press the **Screen Capture** button, you automatically capture the entire screen. There is no Capture toolbar for the Mac version of SMART Board software.

Using the Eraser

When you press the **Eraser** pen tool button, you can touch the screen to remove your notes.

NOTE: If you create geometric shapes using the Floating Tools, you can't remove these shapes using the eraser. To remove a geometric shape, select it and press the **Delete** key.

To erase a note

- 1. Press the **Eraser** button on the DT770.
- 2. Drag your finger or the tethered pen over the unwanted note.



You can change the size of the eraser. For more information, refer to the *SMART Board Software User's Guide*.

Using the Function Buttons

You can press the function buttons to launch:

- Screen Capture tools: a set of tools you can use to capture an on-screen image and insert it into Notebook software
- SMART Keyboard: a virtual keyboard that floats over the active application and lets you enter typed text at the pointer location
- Notebook software: an application that helps you organize, save and share your notes

• Floating Tools: a virtual palette of tools



NOTE: For more information on using or customizing the Screen Capture tools, the SMART Keyboard, Notebook software or Floating Tools, refer to the *SMART Board Software User's Guide* or the SMART Board software online Help.

To open the Screen Capture tools

1. Press the Screen Capture function button on the DT770.

The Capture toolbar appears.

2. Select the option to capture a specific area, a window or the entire screen.

Your screen capture appears in a Notebook file.

NOTE: If your DT770 is connected to a Mac computer and you press the **Screen Capture** button, you automatically capture the entire screen. There is no Capture toolbar for the Mac version of SMART Board software.

To open the SMART Keyboard

1. Press the **Keyboard** function button on the DT770.

The SMART Keyboard appears over your application.

2. Press the on-screen keyboard's keys with your finger or the tethered pen.

To open Notebook software



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Press the **Notebook Software** function button on the DT770.

SMART Notebook software opens.

To open the Floating Tools

Press the Floating Tools function button on the DT770.

The Floating Tools appear.

NOTE: If your DT770 is connected to a Mac computer and you press the **Floating Tools** button, the SMART Board Control Panel opens.

Using the Room Control Interface Button



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You can press the **Room Control Interface** button to open room control interface menus (room control system not supplied). For information on setting the file location of the room control software, see page 20.

NOTE: This feature is not available if your DT770 is connected to a Mac computer. Instead, if you press the Room Control Interface button, Online Help opens.

Customizing Buttons

If your DT770 is connected to a computer running a Windows operating system, you can customize the four function buttons, the Right-Click pen tool button and the room control interface button.

If your DT770 is connected to a Mac computer, you can customize the Keyboard function button and the Right-Click pen tool button

To customize a button (Windows operating system)

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

2. Press Pen and Button Settings.

3. If the dialog box displays more than one SMART product, press **Sympodium**.



4. Press the **Customize Buttons** button.



The Customize Buttons dialog box appears.

- 5. To change the function of a particular function or pen tool button, select the arrow alongside the appropriate graphic and select the required function.
- 6. To set the file location of the room control software (not supplied), press **Browse**. Then, navigate to and select the required .exe file, and press **Open**.
- 7. Press **OK** to apply the new settings.

To customize a button (Mac Computers)

- 1. Press the SMART Board icon in the Dock, and press Open Control Panel.
 - 2. Press Pen Tray.

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3. Press the large **Pen Tray** button on the left side of the dialog.



- 4. To change the function of the Keyboard function button or the Right-Click pen tool button, press the arrow beside the appropriate graphic and select the function you'd like.
- 5. Press **OK** to apply the new settings.

Setting the Pen Tool Defaults

You can set up the DT770 so that a particular pen tool is active when you turn it on.

NOTE: This feature is not available if your DT770 is connected to a Mac computer.

To set the pen tool default

- 1. Press the **SMART Board** icon in the system tray (Windows operating systems) or in the Dock (Mac computers), and press **Control Panel**.
- 2. Press Pen and Button Settings.
- 3. If the dialog box displays more than one SMART product, press **Sympodium**.



4. Press the **Default Settings** button.



The Sympodium Pen Tool Function dialog box appears.

- 5. Set the default pen tool function to either **Last pen tool used** or to a specific pen tool.
- 6. Press **OK** to apply the new setting.

Enabling Pen Touch Only or Finger Touch Only Mode

By default, the DT770 automatically switches between detecting your finger (when the tethered pen is in the pen recess) and detecting the pen (when the tethered pen isn't in the recess). However, you can disable the DT770's ability to detect your finger by switching to Pen Touch Only mode. Similarly, you can disable the DT770's ability to detect the tethered pen by switching to Finger Touch Only mode.

NOTE: This feature is not available if your DT770 is connected to a Mac computer.

To enable Pen Touch Only or Finger Touch Only mode

- 1. Press the **SMART Board** icon in the system tray (Windows operating systems) or in the Dock (Mac computers), and press **Control Panel**.
 - 2. Press Pen and Button Settings.

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3. If the dialog box displays more than one SMART product, press Sympodium.



4. Press the **Default Settings** button.



The Sympodium Pen Tool Function dialog box appears.

- 5. Set the Pen/Finger Touch setting to Automatically switch between pen and finger, Finger Touch Only or Pen Touch Only.
- 6. Press **OK** to apply the new setting.

This chapter offers you advice on cleaning the DT770.



Cleaning the Interactive Pen Display

Turn off the DT770 before you clean it.

Clean the interactive pen display surface regularly. Otherwise, dust can build up and diminish the performance of the DT770.

Don't spray glass cleaner directly onto the screen surface. Instead, spray the cleaner lightly on a cloth and then gently wipe the screen surface. The DT770 uses digital cameras located inside the frame. If excess glass cleaner flows into the crack between the frame and the writing surface, the fluid can damage the cameras.



WARNING Don't open or disassemble the Sympodium DT770 interactive pen display. You risk electrical shock from the high voltage inside the casing. Also, if you open the casing, you void the warranty.

Take care when you clean the mirror as this is a sensitive optical component. Clean it rarely. Spray standard glass cleaner onto a soft cotton cloth and gently wipe the mirror.

CAUTION

Don't use paper products to clean the mirror. They can scratch the mirror surface.

Cleaning the Tethered Pen

To clean the tethered pen, gently wipe the pen with a damp cloth.



The tethered pen is a sealed unit that contains electronics but no batteries. If you attempt to open the tethered pen, you'll damage these electronics. This makes the tethered pen unusable and voids the warranty.

Troubleshooting

This chapter offers suggestions for troubleshooting your DT770.

Checking the Power of the Interactive Pen Display

The Power indicator shows whether power is reaching the interactive pen display.



If the Power Indicator is	this indicates that the DT770 is
Illuminated and green	turned on and receiving a video signal from your computer.
Illuminated and orange	turned on but isn't receiving a video signal from your computer.
Off	turned off.

If the power indicator is illuminated and orange, make sure that:

- the video cable is correctly connected to the DT770 and the computer
- the video cable isn't bent or broken and doesn't have bent or broken pins in either connector
 NOTE: If you're using a video cable adaptor, check those connections too.
- the computer is on and not in sleep or power management mode

If you still can't see an image on the display, refer to Image Problems on page 26.

If the power indicator is off, make sure that:

- the DT770's power cable is connected properly
- the DT770 is turned on

If the power indicator still doesn't illuminate, contact SMART Technical Support (page 33).

Checking the Status of the Interactive Pen Display

The Status indicator shows whether the interactive pen display is communicating with your computer correctly.



If the Status Indicator is	this indicates that the DT770
Illuminated and green	is communicating correctly with SMART Board software.
Flashing green	is communicating with a computer that doesn't have SMART Board software installed.
Illuminated and orange	can't communicate properly with your computer.
Flashing orange	can't communicate properly with your computer or is running a firmware upgrade utility.
Red	isn't communicating with SMART Board software.
Off	is turned off.

If the Status indicator is illuminated and orange, or is flashing orange, contact SMART Technical Support (page 33)

If the Status indicator is off, make sure that the Power indicator is on.

Image Problems

If you don't see an image on the interactive pen display, check that the DT770 is turned on and that you have connected the power and video cables correctly. If this doesn't resolve the problem:

- Ensure that the computer resolution isn't higher than 1280 × 1024 pixels
- Ensure the computer refresh rate is set to 60 Hz or 75 Hz.
- Change the contrast and brightness settings of the DT770 (page 29).
- Check that the computer's video card is compatible with the DT770 by connecting the computer to another monitor and verifying that the image is properly displayed. For further information, refer to the instructions that came with your video card or your computer.

When you use the screen, there may be some anomalies in the image appearance. The following irregularities aren't necessarily indications that the screen is defective:

- A very small number of pixels are permanently illuminated, not illuminated at all or show an incorrect color.
- The image flickers or appears striped.

Control and Writing Problems

If the pointer doesn't accurately follow the movement of the tethered pen or your finger, orient the DT770 (page 14).

If the digital ink doesn't appear as you expect, check the customizable pen settings within SMART Board software. For more information on setting digital ink properties (such as color, line thickness, line style and transparency) refer to the SMART Board software online Help.

NOTE: You can manipulate objects and create notes on the interactive pen display only if the computer is running SMART Board tools. You'll know that SMART Board tools are running if you can see the SMART Board icon in the system tray or the Dock.

If you can't manipulate objects or write notes using your finger, ensure that the tethered pen is in the pen recess and that the pen's indicator is off. If you place the pen in the recess and the indicator still glows, move the pen to the side until the indicator stops glowing. The DT770 can detect objects other than the tethered pen (such as your finger) only when the pen is correctly in the recess and the indicator is off.

Troubleshooting Summary Table

The following table summarizes the symptoms, the likely causes and the remedies of potential issues with the DT770.

Symptom	Likely Cause	Remedy
No LEDs are illuminated	Power problem	Check all the power connections. Ensure you're using the power adapter that came with the DT770.
		Check that the computer is on, its USB port is active, and that it's sending out a video signal.
		Check that the DT770 is turned on.
The video	Display problem	Check that the video cable is connected properly.
image doesn't display on the		Check that the DT770 is turned on.
screen		Check that the computer isn't in standby mode.
		Check that the computer's resolution setting isn't higher than 1280 × 1024 and its refresh rate is set to 60 Hz or 75 Hz.
		Reset the on-screen display settings (page 29).
You can see an image on the screen, you can move the pointer, but you can't write notes over the application	SMART Board tools aren't running	Check that SMART Board tools are running. You'll know that they are running if you can see the SMART Board icon in the system tray or the Dock.

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Symptom	Likely Cause	Remedy
The white in an image doesn't appear to be white on the screen	Video image problem	Check the video connection. Return the screen to the factory defaults (page 30). If you like, adjust the color setting (page 29). For details on the color management features of your operating system or the application that you're using, read the instructions provided with your operating system or the application.
Multiple images appear on the interactive screen	Video problem	Use only the supplied video cable. Don't extend the video cable to more than 50' (15 m) unless the video signal is amplified.
The image ripples, flickers, or has uneven colors	Screen setting problem	Check the phase settings in the <i>On-Screen Display Menu</i> (page 29), and adjust them if necessary. Check the contrast or brightness settings in the <i>On-Screen Display Menu</i> (page 29), and adjust if necessary. Reset the on-screen display settings (page 30). Ensure your video card is compatible with the DT770. Adjust your computer's refresh rate.

Calibrating the Cameras

Digital cameras in the corners of the interactive screen are calibrated to recognize the position of your finger on the screen's surface. If the cameras lose their alignment for any reason, you may experience "broken ink" (gaps in your writing) when you create notes using your finger, or an area of the screen may no longer respond.

NOTE: If the cameras lose their alignment, this does not affect the accuracy or the writing ability of the tethered pen.

Fortunately, you can realign the cameras by performing a simple calibration procedure. If you think that you need to calibrate the DT770's cameras, contact SMART Technical Support (page 33).

Appendix A: Adjusting the Screen Settings

You can fine-tune the screen settings by using the DT770's Display Control buttons and the *On-Screen Display Menu*. For a functional description of all the display settings, see the table below.

To adjust the screen display settings

MENU

1. Press the **Menu** button on the DT770.

Page 1 of the On-Screen Display Menu appears.

2. Select and edit the required screen display settings as follows.

Press the **Menu** button to display the next page of the *On-Screen Display Menu*.

Press the Auto Select button to scroll through the list of options on the current page.

If the currently selected option has a numerical setting, press the + button to increase the setting. If the currently selected option has a Yes or No setting, press the + button to set the option to **Yes**.

If the currently selected option has a numerical setting, press the - button to decrease the setting. If the currently selected option has a Yes or No setting, press the - button to set the option to **No**.

NOTE: You can't use the tethered pen, mouse or keyboard to change the menu page, scroll through the options or edit a value. You can only use the interactive pen display's Display Control buttons as described above.

Function	Description
	Fine-tunes the computer image based upon the incoming RGB signal.
Auto Adjustment	NOTE: Some computers and graphics cards don't allow Auto Adjustment to function correctly when you first connect the screen. If the display doesn't fit within the LCD panel border or if some portion of the text appears blurred, adjust the clock and the phase (see below).
Contrast	Increases or decreases image contrast
Contrast	NOTE: For optimal display clarity, set the Contrast to 65 or higher.
Brightness	Increases or decreases image brightness
Horizontal Position	Moves the screen image left or right
Vertical Position	Moves the screen image up or down
Clock	Changes the display data frequency to match the frequency of your graphics card. Reduces or eliminates horizontal distortion lines.
Phase	Changes the signal timing of the display to match your graphic card. Reduces or eliminates horizontal distortion lines.
Display Mode	Displays the current display resolution and vertical and horizontal refresh rates

OSD Off-Time	Sets the length of time before the <i>On-Screen Display Menu</i> turns off automatically
Language	Selects a language for the On-Screen Display Menu
Sharpness	Increases or decreases image sharpness
Reset	Resets all screen options to the factory default settings
Volume	This function isn't used
Mute	This function isn't used
Input Select	This function isn't used
Color Setting	Adjusts the display's red, blue and green settings
Color Adjustment Red	Adjusts the display's red component
Color Adjustment Blue	Adjusts the display's blue component
Color Adjustment Green	Adjusts the display's green component

3. Press the **Menu** button.

NOTE: The new settings are saved when you press the Menu button.

4. Repeat step 3 until the menu disappears.

To reset the screen display settings to the factory defaults

- MENU) 1. Press the **Menu** button on the DT770 twice.
 - Page 2 of the On-Screen Display Menu appears.
 - 2. Press the **Auto Select** button four times to scroll to the *Reset* option.
 - 3. Press the + button to reset the screen display settings.

AUTO SELECT

+

Waste Electrical and Electronic Equipment (WEEE) Regulations

Waste Electrical and Electronic Equipment (WEEE) regulations apply to all electrical and electronic equipment sold within the European Union.

When you dispose of any electrical or electronic equipment, including SMART products, we strongly encourage you to contact your local WEEE recycling agency for recycling and disposal advice.

Your SMART product required the extraction and use of natural resources for its production. It may contain hazardous substances. By disposing of electrical and electronic equipment appropriately, you lower the impact of these substances upon health and the environment and reduce the pressure on natural resources. Recycling agencies can reuse or recycle most of the materials from your product.

Please think about how you intend to dispose of any product that has a WEEE symbol or accompanying WEEE guidelines.



If you need more information on the collection, reuse and recycling of electrical and electronic equipment, please contact your local WEEE recycling agency.

Alternatively, contact your local reseller or SMART Technologies for information on the environmental performance of our products.

Training

Do you need training on your SMART product? Visit http://smarttech.com/trainingcenter for free training materials and information on our training services.

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 SMART product, 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: +1.403.806.1256

E-mail: support@smarttech.com

Website: www.smarttech.com/support

When you phone Technical Support, it's helpful if you have access to your SMART product 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)

NOTE: You can locate the serial number on the back of the unit and on the original packaging.



TIP

Write the DT770's serial number in the front of this guide for future reference.

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. 1207 – 11th Avenue SW, Suite 300 Calgary, AB T3C 0M5 CANADA

Warranty

Product warranty is governed by the terms and conditions of SMART's "Limited Equipment Warranty" that shipped with the SMART product at the time of purchase.

Registration

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

Sending Feedback

You can help us improve our technical documentation by e-mailing your comments to TechnicalDocumentation@smarttech.com.

Obtaining More Information on SMART Products

Visit www.smarttech.com/support to:

- read technical bulletins, FAQs and tips
- download PDF versions of our user guides and more

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