



# Digital Wall Display

Operator's Guide

Guide de l'opérateur

Benutzerhandbuch

Guida dell'operatore

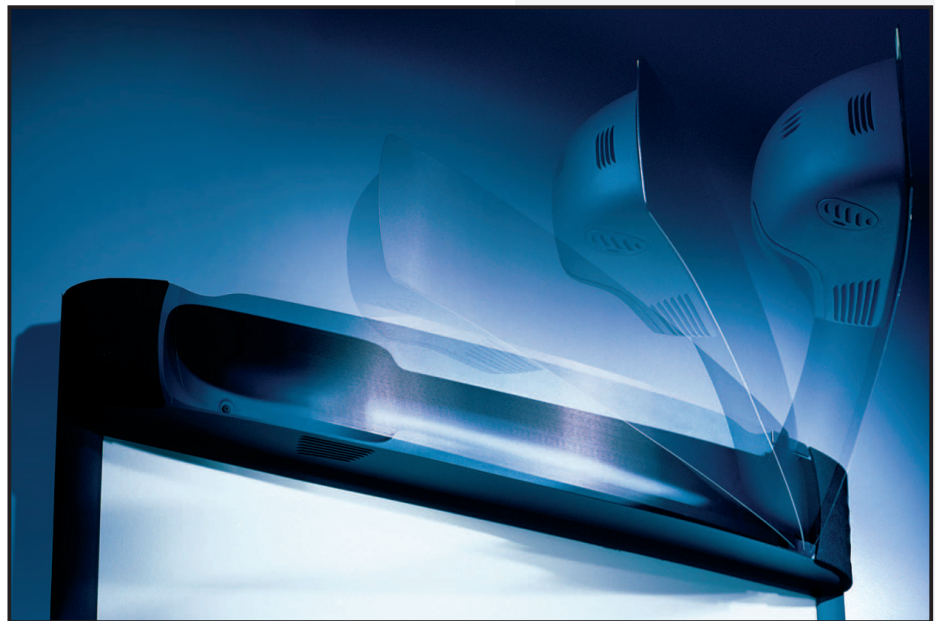
Guía del operador

*...interactive whiteboard*

**9200IW Plus**

*...deluxe interactive whiteboard*

**9200IC Plus**



August 2005  
78-6970-9429-6 Rev. A  
Copyright © 2005, 3M.  
All Rights Reserved.

(This page intentionally left blank for printed version)

# Contents

## ENGLISH

Introduction.....	7
Installation and System Setup .....	17
Operation .....	22
Remote Control Unit .....	24
Digital Markers and Eraser.....	27
Menu System .....	29
Using the 3M Wall Display as a Copyboard .....	32
Maintenance.....	36
Troubleshooting .....	45
Service Information .....	53
Appendix.....	54

## FRANÇAIS

Introduction.....	61
Installation et Configuration du Système .....	72
Operation .....	77
Télécommande .....	79
Marqueurs et effaceur numériques .....	82
Système de menu .....	84
Utilisation du 3M Digitale Wall Display comme Tableau copieur .....	87
Entretien.....	91
Dépannage .....	100
Service après-vente.....	108
Annexe .....	109

## DEUTSCH

Einleitung.....	115
Installation und Einrichtung des Systems .....	125
Bedienung .....	130
Fernbedienung .....	132
Digitale Marker und Tafelwischer.....	135
Menüsystem.....	137
Einsatz des Wall Display als Copyboard.....	140
Wartung.....	144
Fehlerbeseitigung.....	153
Serviceinformationen.....	162
Anhang.....	163

**ITALIANO**

Introduzione .....	145
Installazione e impostazione del sistema.....	155
Funzionamento.....	160
Telecomando .....	162
Sistema di menu.....	166
Manutenzione.....	172
Risoluzioni dei problemi .....	181
Informazioni per l'assistenza.....	183
Appendice .....	184

**ESPAÑOL**

Introducción .....	191
Instalación del sistema.....	201
Funcionamiento .....	206
Unidad de control remoto.....	208
Sistema de menús .....	212
Mantenimiento .....	218
Resolución de problemas.....	227
Información sobre reparaciones.....	229
Apéndice .....	230

# Contents

## Introduction

Thank You for Choosing 3M .....	7
Safety Information .....	7
Intended Use .....	7
Product Safety Label .....	11
Save These Instructions .....	11
Trademarks .....	11
Patents .....	11
Software and Copyright License Agreement.....	11
3M Digital Wall Display Technical Support .....	11
FCC Statement—Class A .....	12
EEC Statement—Class A .....	12
Model Identification and Differences .....	13
Contents .....	14
Optional Accessories .....	14
What's Next? .....	14
Part Identification .....	15
3M Digital Wall Display Features .....	16

## Installation and System Setup

Recommendation and Things to Consider Before Installing .....	17
Installing the Wall Bracket .....	18
Hanging the 3M Digital Wall Display .....	19
System Setup .....	21

## Operation

Startup .....	22
Shutdown .....	23

## Remote Control Unit

Features .....	24
Forward Keypad.....	25
Rear Keypad .....	25
Trigger Button.....	25
Installing or Replacing Batteries .....	26

## Digital Markers and Eraser

Assembling Digital Markers.....	27
Assembling Digital Eraser.....	28

**Menu System**

Menu Navigation ..... 29

Audio ..... 29

Video ..... 29

Picture ..... 30

PIP ..... 30

Configuration ..... 31

**Using the 3M Wall Display as a Copyboard**

Installing eBeam™ Software on Your Computer ..... 32

Installing the Software ..... 32

Copyboard Mode (9200IC Plus) ..... 32

Projection Mode ..... 32

Using Copyboard Mode (9200IC Plus) ..... 33

Using Projection Mode ..... 34

The Interactive Stylus ..... 35

**Maintenance**

General Maintenance ..... 36

Lamp Usage ..... 36

Onscreen Lamp Messages ..... 36

Lamp Replacement ..... 37

Resetting Lamp Hours ..... 40

Fan Screen Cleaning ..... 40

Replacing Projection Screen ..... 41

Optical Engine Adjustment ..... 42

**Troubleshooting**

Common Problems and Solutions ..... 45

Onscreen Messages ..... 46

eBeam Software ..... 47

eBeam Hardware Detection/Use ..... 47

Network Connection/Shared Meetings ..... 48

Writing Data/Capture ..... 49

EFI Meeting Applet ..... 51

Background Images ..... 52

**Service Information**

Replacement Parts ..... 53

Optional Accessories ..... 53

Ordering Parts or Getting Information ..... 53

**Appendix**

3M™ Digital Wall Display Specifications ..... 54

Input/Output Signal Specifications ..... 55

Computer Compatibility ..... 55

# Introduction

## Thank You for Choosing 3M

Thank you for choosing 3M equipment. This product has been produced in accordance with 3M's highest quality and safety standards to ensure smooth and troublefree use in the years to come.

For optimum performance, please follow the operating instructions carefully. We hope you will enjoy using this high performance product in your meetings, presentations, and training sessions.

## Safety Information

Please read, understand, and follow all safety information contained in these instructions prior to the installation and use of the 3M Digital Wall Display. Retain these instructions for future reference.

## Intended Use

Before operating this machine, please read the entire manual thoroughly. The 3M Digital Wall Display Systems are designed, built, and tested for use indoors, using 3M lamps, 3M mount hardware, and nominal local voltages.

The use of other replacement lamps, outdoor operation, or different voltages has not been tested and could damage the projector or peripheral equipment and/or create a potentially unsafe operating condition.

3M Digital Wall Display Systems are designed to operate in a normal office environment.

- 16° to 29° C (60° to 85° F)
- 10 to 80% RH (without condensation)
- 0 to 1828 m (0 to 6,000 feet) above sea level

The ambient operating environment should be free of airborne smoke, grease, oil and other contaminants that can affect the operation or performance of the 3M Digital Wall Display.

Use of this product in adverse conditions will void the product warranty.

### Explanation of Signal Words and Symbols in Safety Labels and Instructions

**WARNING:** Indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury and/or property damage.

**CAUTION:** Indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury and/or property damage.



**Warning:** HIGH VOLTAGE



**Caution:** HIGH TEMPERATURE



**Warning;** HIGH PRESSURE



**Attention:** Refer to Safety Instructions in Guides

**⚠ WARNING****To reduce the risk associated with hazardous voltage:**

- Do not attempt to service the Wall Display other than performing routine lamp replacement. Service should only be performed by a 3M authorized service provider. Aside from the projection lamp assembly, there are no serviceable parts inside the unit.
- Switch power “OFF” and disconnect the plug from electrical outlet before replacing the lamp. Grasp plug and pull to disconnect.
- Replace the power cord if damaged.
- Always plug this product into a grounded outlet.
- Do not use in a wet environment.

**To reduce the risk associated with hazardous voltage and fire:**

- Switch power “OFF” and disconnect the plug from electrical outlet whenever the unit is not in use for an extended period of time.
- Use a properly rated extension cord. Consult an electrical professional if you have questions.

**To reduce the risk associated with muscle strain and impact:**

- Use only the 3M™ brand wall mounting hardware kit if wall mounting is desired.
- Strictly follow all installation instructions when installing or removing the Wall Display onto the wall or portable cart.
- Always use more than one person when installing or removing the Wall Display.
- Always keep cart and Wall Display stable.

**To reduce the risks associated with glass dust falling from the projection arm into the eye:**

- Do not look up towards the projection arm in the event of lamp breakage.

**To reduce the risk associated with high temperature related to a hot lamp assembly:**

- Wait at least 45 minutes for the lamp assembly to cool before replacing.

**To reduce the risk associated with the release of high pressure related to a hot lamp:**

- Wait at least 45 minutes for the lamp assembly to cool before replacing.

**To reduce the risk associated with unexpected lamp rupture related hazards:**

- Ventilate the area where the lamp rupture occurred. The lamp operates at high pressure and at high temperature.
- Have a 3M authorized service provider replace a ruptured lamp.
- Always handle the fragile lamp module with care.
- Wash your hands thoroughly if you come in contact with lamp debris.
- Replace the lamp module when the lamp replacement message appears.
- Never replace the lamp module with a previously used lamp module.

**To reduce the risk associated with choking:**

- Keep batteries away from children and pets.

**To reduce the risk of associated with environmental contamination, due to mercury in the projection lamp:**

- Don't throw the lamp cartridge in the trash. Dispose of the lamp cartridge in accordance with your respective governmental agencies for hazardous waste. For disposal information in the U.S., contact the Electronic Industries Alliance at [www.lamprecycle.org](http://www.lamprecycle.org). In Canada, contact the Electronic Product Stewardship Canada at [www.wpsc.ca](http://www.wpsc.ca).



**⚠ WARNING****To reduce the risk of environmental contamination due to lead based solder:**

- Don't throw circuit boards in the trash. Dispose of circuit boards in accordance with your respective governmental agencies for hazardous waste.

**To reduce the risk associated with radio interference:**

- This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

**To reduce the risks associated with hazards related to the use of alcohol based cleaners;**

- Follow all instructions and recommendations in the Sanford Expo Whiteboard Cleaner Material Safety Data Sheet and product label.

**⚠ CAUTION****To reduce the risk associated with tripping over cables:**

- Position the product's power cord and data cable so that they will not be tripped over.

**To reduce the risk associated with chemical leakage, hot battery surface, and battery rupture:**

- Use only same type AAA alkaline batteries in remote control.
- Use only same type AA alkaline batteries in presentation pen.
- Use only same type CR2032 Lithium coin batteries in pens and eraser.
- Avoid fire and heat sources above 100° C.
- Do not short circuit batteries.
- Do not attempt to recharge batteries.
- Do not break or disassemble batteries.
- Avoid eye and skin contact, ingestion and inhalation of battery chemicals in the event of a ruptured or broken battery.
- Replace all batteries at the same time.
- Properly orient the plus (+) and minus (-) terminals of the batteries.
- Remove batteries when not used for an extended period of time.

**To reduce the risks associated with impact from the projection arm and tripping over the legs of the portable cart:**

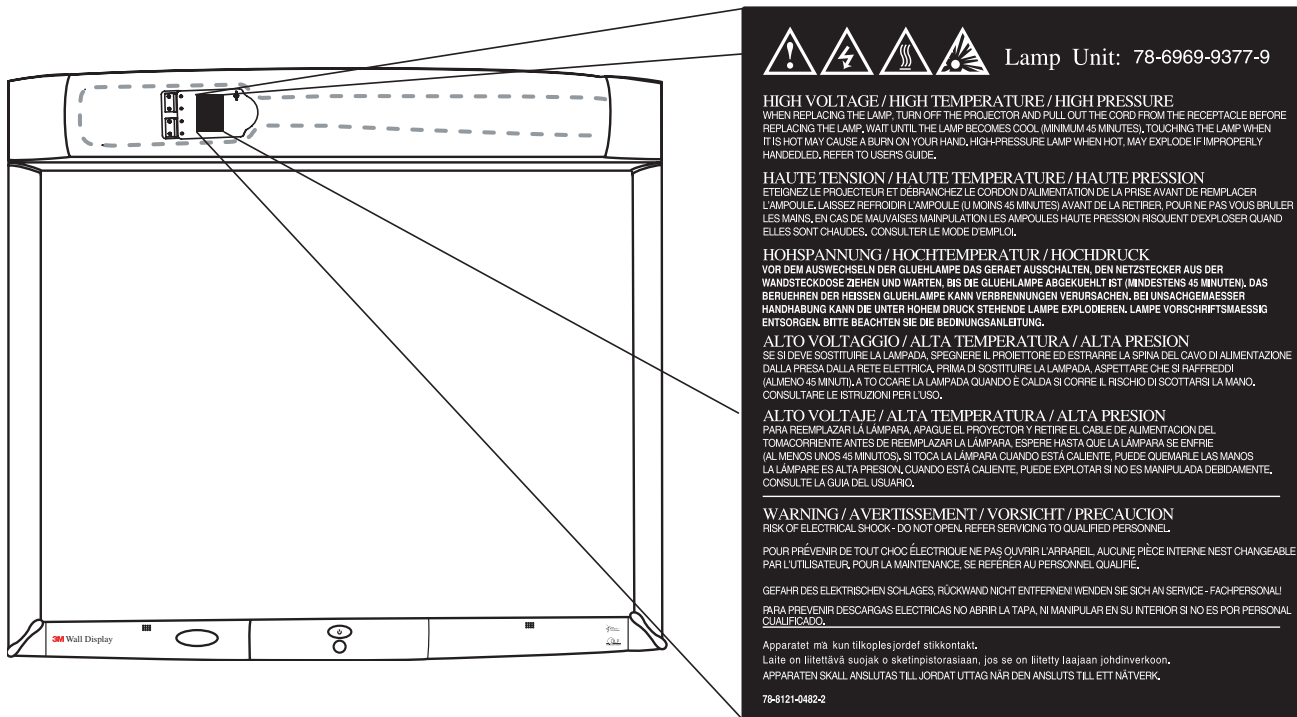
- Do not use this Wall Display around unsupervised children.
- Do not allow children to hang onto the projection arm.

**IMPORTANT NOTES**

- In some countries, the voltage is not stable. This appliance is designed to operate within a range of 100~240 Vac. In these countries, it is recommended to install a power stabilizer unit.
- Do not manually open or close the projection arm while the 3M Digital Wall Display is in operation.
- Save the shipping box and packing materials in the event the 3M Digital Wall Display should ever need to be moved.
- For other types of wall material (e.g. wood, concrete, concrete block) use mounting hardware that is properly rated for the weight of the unit and is intended for specific wall material.
- Most of the weight is at the projection head/speakers end of the 3M Digital Wall Display.
- Use the enclosed cables to ensure image and audio quality. Substituting cables of lesser quality may result in poor image quality or audio noise.
- There is a 30-second reset period before the On/Off Button will function again. During this period, the On/Off Button will flash red.
- If the 3M Digital Wall Display will not be moved or disconnected, leave the Master Power Switch on for your convenience.
- Do not turn off the Master Power Switch or unplug the power cord before pressing the On/Off Button. After the On/Off Button is pressed, the fan continues for approximately five minutes to cool the 3M Digital Wall Display.
- The USB or serial mouse cable must be connected between the 3M Digital Wall Display and the computer when using Mouse mode.
- Avoid excessive heat and humidity. Do not mix old and new batteries or different types of batteries.
- The eBeam™ Software detects the color of the marker sleeve, not the color of the marker inside it, unless specifically changed. Normal pressure on the marker as you write on the 3M Digital Wall Display screen sends a “writing” signal in that sleeve’s designated color.
- The signal transmitter in the digital sleeve is located just behind the tip of the marker. Grasp the sleeve by the main barrel so your fingers will not block the signal.
- Choose New Page to save your work before you erase the board.
- You must hear or feel a distinctive snap to ensure facade is securely attached.
- Do not reset the lamp hours if the lamp cartridge was not changed. This can damage internal components.
- Before continuing with this adjustment, move the arm assembly up and down to relieve any stress and see if the arm will realign itself and project an aligned image.
- After making adjustments it may be necessary to perform the side to side adjustment to center the image properly.

## Product Safety Label

The following safety label is used on or within the 3M Digital Wall Display to alert you to this area requiring your attention.



## Save These Instructions

The information contained in this manual will help you operate and maintain your 3M Digital Wall Display.

## Trademarks

3M is a registered trademark of 3M Company. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.

## Patents

This product is covered by one or more of the following patents:

U.S. Patent Number D442,205

U.S. Patent Number 6,179,426

U.S. Patent Number 6,394,609

## Software and Copyright License Agreement

The software in this distribution is copyrighted and licensed by Luidia, Inc.

## 3M Digital Wall Display Technical Support

- In U.S. or Canada: **1-800-328-1371**
- Web Site: **<http://www.3M.com/Wall Display>**

**FCC Statement—Class A**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Instructions to Users**

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 a 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 instruction manual, 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.

**Notice**

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

**EEC Statement—Class A**

This machine was tested against the 89/336/EEC (European Economic Community) for EMC (Electro Magnetic Compatibility) and fulfills these requirements.

**Video Signal Cables**

Double shielded coaxial cables (FCC shield cable) must be used, and the outer shield must be connected to the ground. If normal coaxial cables are used, the cable must be enclosed in metal pipes or in a similar way to reduce the interference noise radiation.

**Video Inputs**

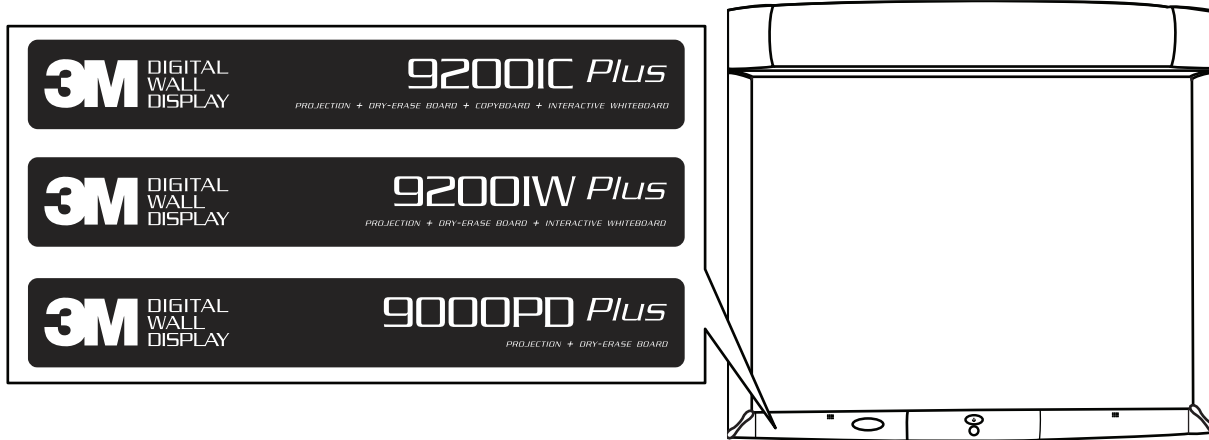
The input signal amplitude must not exceed the specified level.

(See Appendix for these levels.)

## Model Identification and Differences

### Identify Model

The nameplate, located behind the storage door, identifies the 3M Digital Wall Display (DWD). Push the storage door to open it. The figure below shows the nameplate, and the table shows the model numbers and corresponding model names.



Model Number	Model Name
9000PD Plus	3M Digital Wall Display 9000PD Plus for Projection Display
9200IC Plus	3M Digital Wall Display 9200IC Plus with Interactive Collaboration
9200IW Plus	3M Digital Wall Display 9200IW Plus with Interactive Whiteboard

### Model Differences

Below is a table that identifies the differences between the 3M Digital Wall Display models.

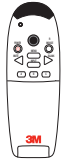
Model Number	Projection Screen	Copyboard*	Interactive Whiteboard**
9000PD Plus	Easy Dry-Erase and Projection	NO	NO
9200IW Plus		NO	YES
9200IC Plus		YES	YES

\*The Copyboard feature allows you to print notes written on the 3M Digital Wall Display to an attached printer. (HP or Epson USB-compatible printer required.)

\*\*The Digital Whiteboard feature allows you to capture notes written on the 3M Digital Wall Display with an attached computer or use the 3M Digital Wall Display as an interactive display for a computer.

## Contents

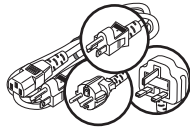
The 3M Digital Wall Display is shipped with the necessary cables required for standard VCR, PC, Macintosh or laptop computer connections. Carefully unpack and verify that you have all of the items shown below. If any are missing, please contact your place of purchase.



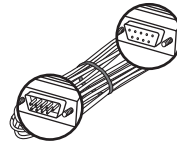
Remote Control  
(with  
batteries)



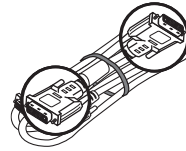
Mac  
adapter



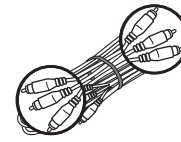
Power Cable  
(US, UK, Euro)



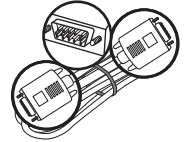
Serial Cable



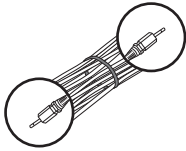
DVI-D Cable



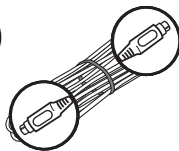
3-Conductor  
Video/Audio Cable



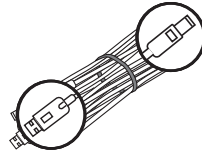
VGA Cable



PC Audio Cable



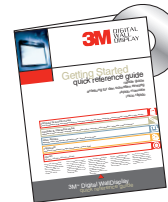
S-Video Cable



USB Cable



Product Safety &  
Installation Guide



Quick Reference  
Guide w/ CD-ROM



Warranty  
Sheet



High-Performance  
Cleaning Cloth

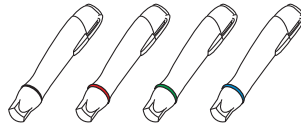
3M DWD 9200IC Plus Only



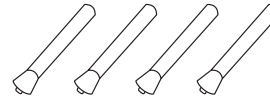
Digital Eraser



Lithium Ion  
Batteries (10)



4 Pen Sleeves



Dry-Erase Markers



Interactive  
Stylus

## Optional Accessories

- Accessory Tray/Laptop Shelf
- Easy-Erase Screen
- Replacement Lamp Kit
- Extended Warranty

**Note:** Save the shipping box and packing materials in the event the 3M Digital Wall Display should ever need to be moved.

## What's Next?

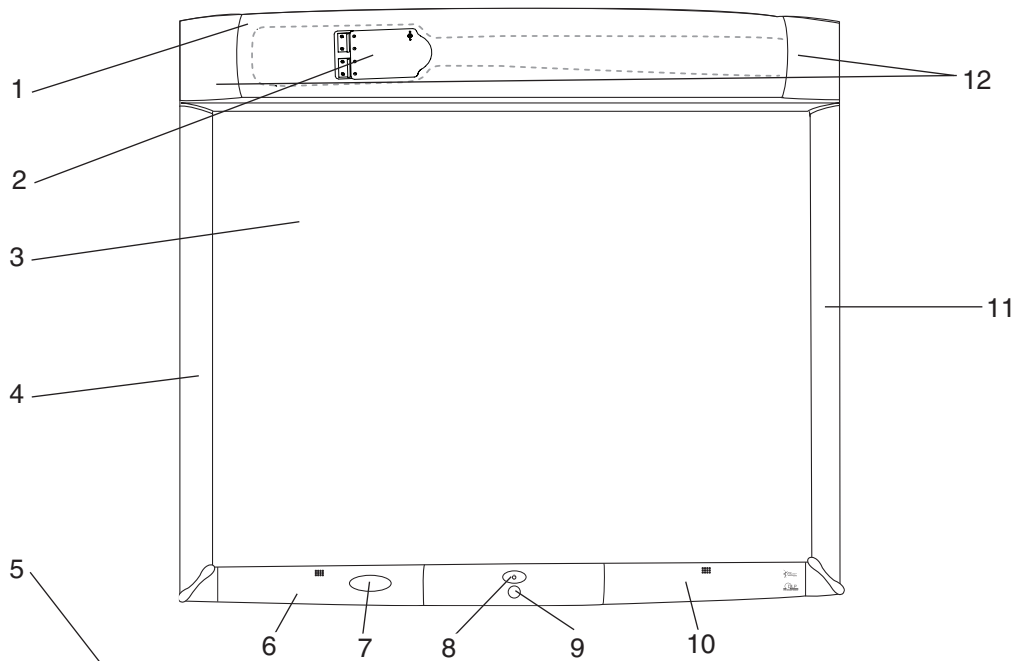
After the 3M Digital Wall Display has been installed in your meeting room, you are ready to set it up.

Please read this guide thoroughly before operating your new 3M Digital Wall Display.

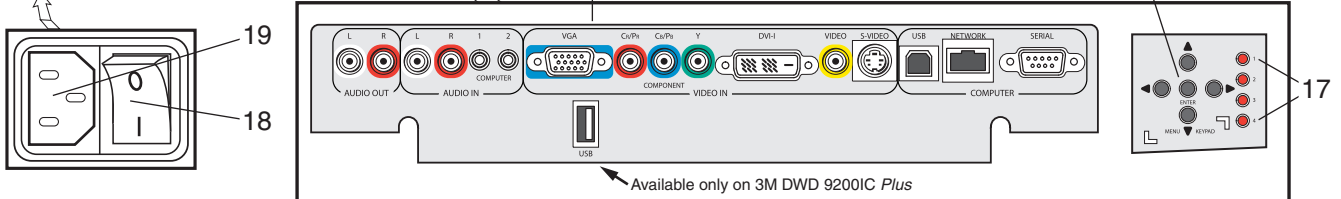
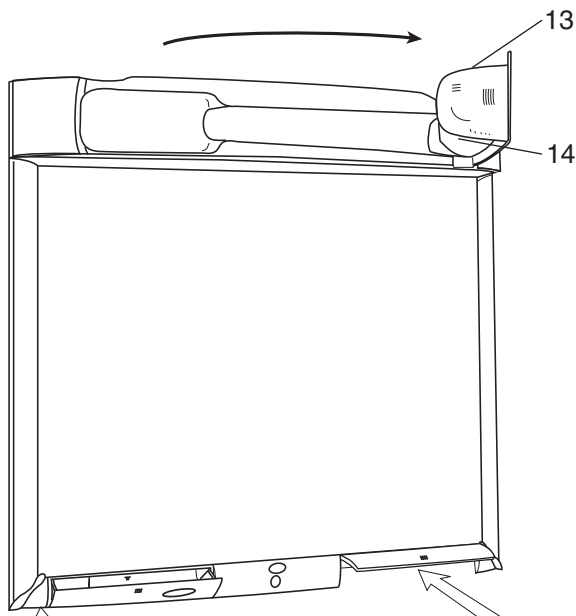
Be sure to check our web site ([www.3M.com/Wall Display](http://www.3M.com/Wall Display)) regularly for updates and supplemental information.

Part Identification

ENGLISH



- 1. Facade
- 2. Lamp Housing Door (behind facade)
- 3. Projection Screen
- 4. Left Bezel
- 5. Remote Control Unit
- 6. Storage Door
- 7. Storage Door Window
- 8. On/Off Button
- 9. Infrared Remote Sensor
- 10. Connection Panel Door
- 11. Right Bezel
- 12. Speakers
- 13. Projection Head
- 14. Projection Arm
- 15. Connection Panel
- 16. Menu Keypad
- 17. Status LED Indicators
- 18. Master Power Switch
- 19. AC Power Cord Socket



## 3M Digital Wall Display Features

The 3M Digital Wall Display combines the following features into one sleek, sophisticated package.

- Full connectivity for computer or video presentations
- Large 60" diagonal screen
- 4:3 screen aspect ratio matches business applications and viewing data
- Flat screen allows extra wide (up to 170°) viewing angles
- Projection arm position guarantees image is in focus every time
- Allows presenter to move without blocking image
- Built-in, powerful stereo speaker system
- Single button operation
- Hand-held remote control for most functions
- HD Compatibility
- Print your meeting notes directly to an HP or Epson USB-compatible printer
- 3M Digital Wall Display 9200IC *Plus* and 9200IW *Plus* unique features:
  - Capture notes in color and save them in various file formats instantly (JPEG, GIF, TIFF, HTML, PDF, vector PDF, EPS, BMP, WBD)
  - Turn the 3M Digital Wall Display into an interactive computer screen by using the virtual mouse
  - Playback feature allows you to review all drawings on the board, including erased items
  - Share meeting notes in real time anywhere in the world via the Internet



# Installation and System Setup

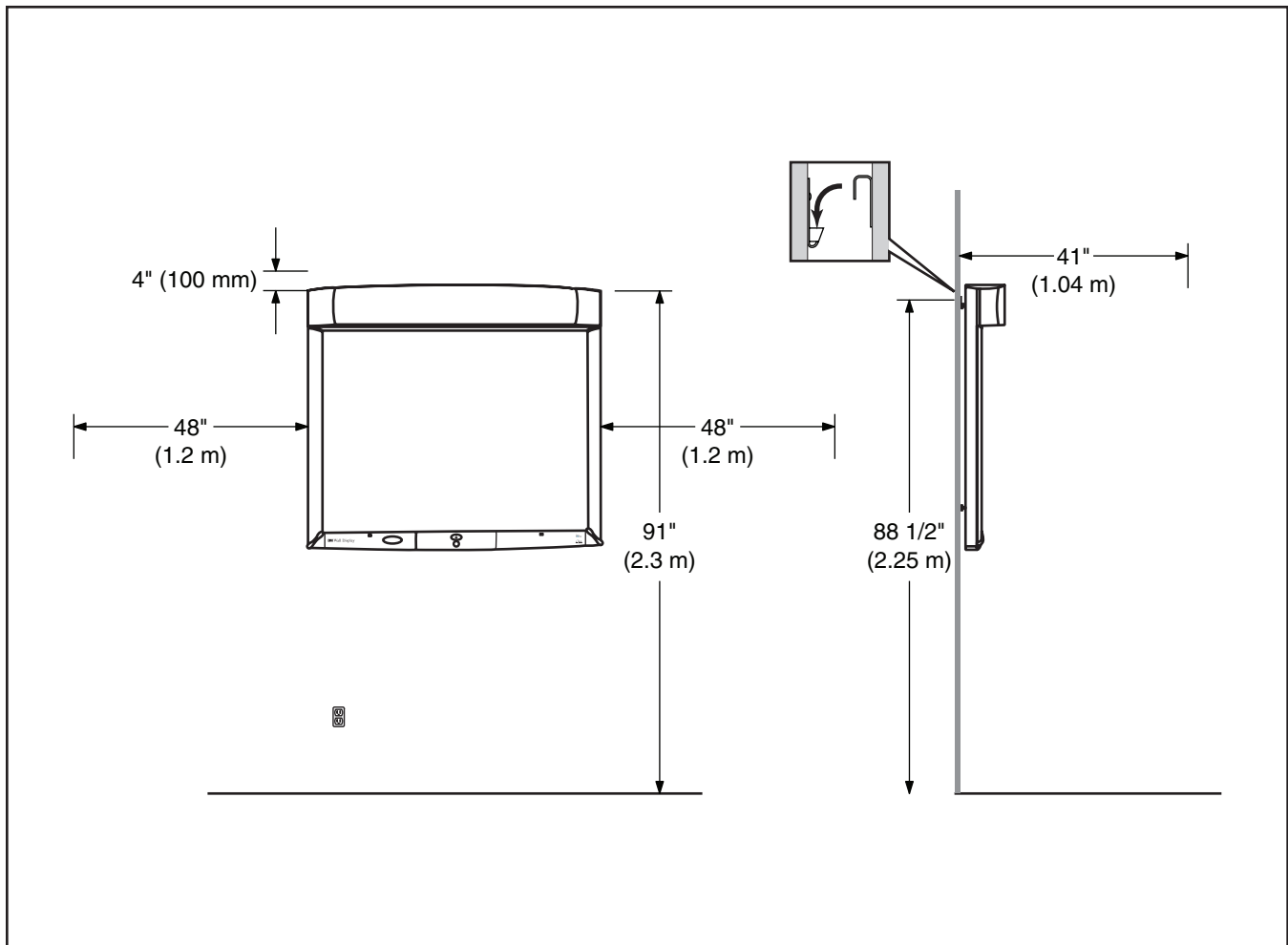
## Recommendation and Things to Consider Before Installing

### Location of Unit

- Place near AC outlet. The AC power connection is located on the lower-left corner of the 3M Digital Wall Display (the unit). The AC power cord supplied with the unit is 6 feet (2 m) long.
- Service and screen replacement – The projection screen is removed from the side of the unit during replacement or service. For ease of replacement and access, position the unit 48 inches from the nearest obstruction or adjacent wall.
- Low-hanging lights – The projection arm extends 3 1/3 feet from the unit while in operation. Ensure that the projection arm will not come in contact with low-hanging light fixtures.

### Air Ventilation

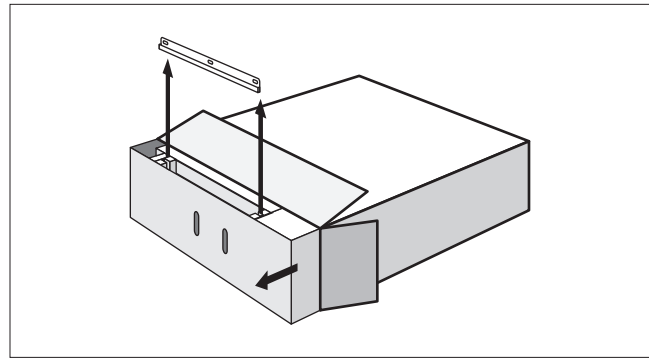
- Minimum clearance around the unit should be 4 inches.
- Air Vents – keep the air vents clear of objects and dust.



## Installing the Wall Bracket

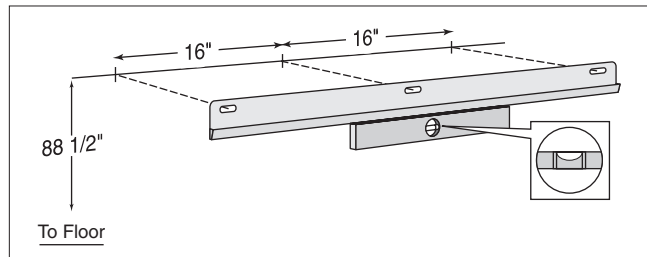
### Unpacking Wall Bracket and Hardware

1. Place the shipping container face up on the floor.
2. Open the end of the shipping container.
3. Slide the shipping tray partially out the container.
4. Locate and remove the wall bracket and hardware. The hardware is taped to the wall bracket.

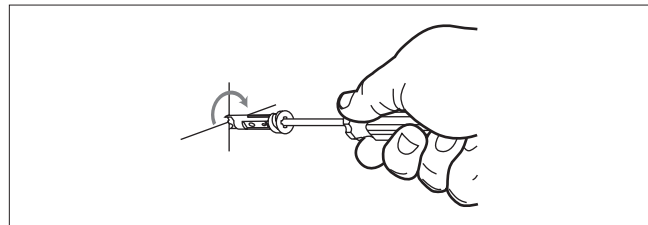


### Installation for a Hollow Wall-Drywall

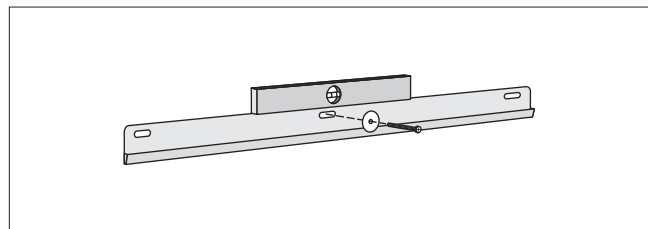
1. Determine the desired location of the unit. Locate all wall studs in area.
2. While holding the bracket in place, use a carpenter's level to ensure the proper level and then mark the three hole locations on the wall. Ensure that no studs are behind the hole locations.



3. Using a Phillips screw driver, screw the supplied anchors into the wall until they are flush with the wall surface.



4. Align the wall bracket holes over the wall anchors and secure with the washer and anchor screws. Confirm that the wall bracket is level before tightening the screws.

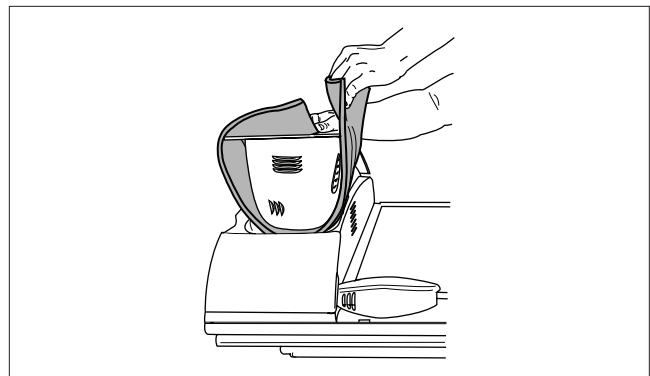
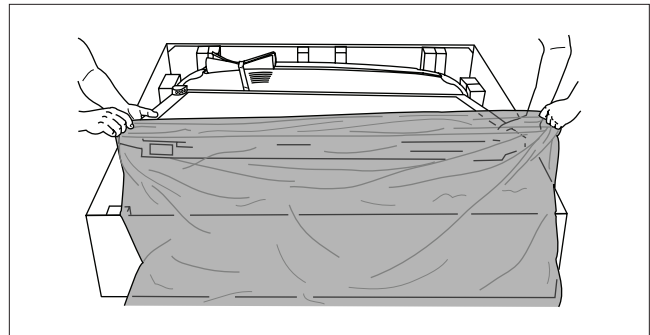
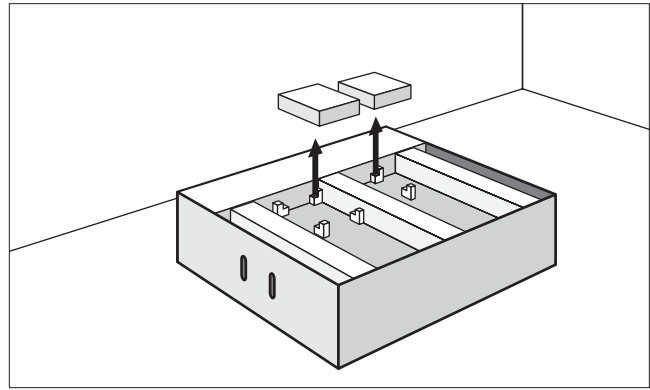


**Note:** For other types of wall material (e.g. wood, concrete, concrete block) use mounting hardware that is properly rated for the weight of the unit and is intended for specific wall material.

## Hanging the 3M Digital Wall Display

### Unpacking the 3M Digital Wall Display

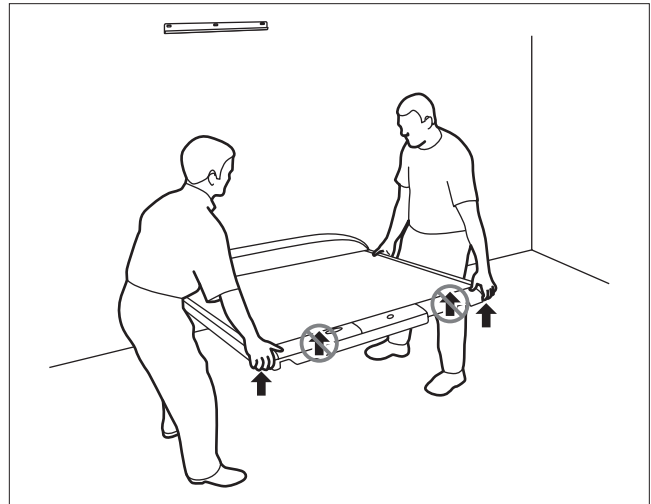
1. Place the shipping container face up on the floor and open the end previously opened.
2. Slide the shipping tray out of the shipping container.
3. Remove the accessory box(es) from the top support.
4. Remove the top support.
5. Remove the plastic bag from the 3M Digital Wall Display by lifting the top of the unit and pushing the bag towards the bottom of the unit. Then set down the top.
6. Lift up the bottom and remove the bag completely.
7. Remove and set aside the tape holding the projection arm in place.
8. Remove the projection arm shipping foam, by opening the projection arm from the left.
9. Replace the tape to hold the projection arm in place while hanging on the wall.



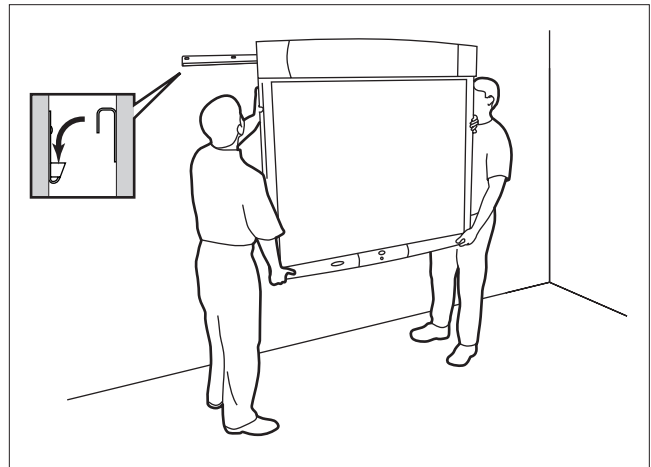
### Hanging on the Wall

1. If possible, position the 3M Digital Wall Display and shipping tray in front of the wall where the bracket is located. Position the unit so that the projection arm is closest to the wall.
2. Clear the path from the unit to the wall where it will be hanging.

**Note:** *Most of the weight is at the projection head/speakers end of the 3M Digital Wall Display.*



3. With one person holding each side of the unit, carefully lift it into position so that the bracket slot is above the wall bracket. Ensure that the unit is securely in place before releasing.
4. Remove the tape from the projection arm.

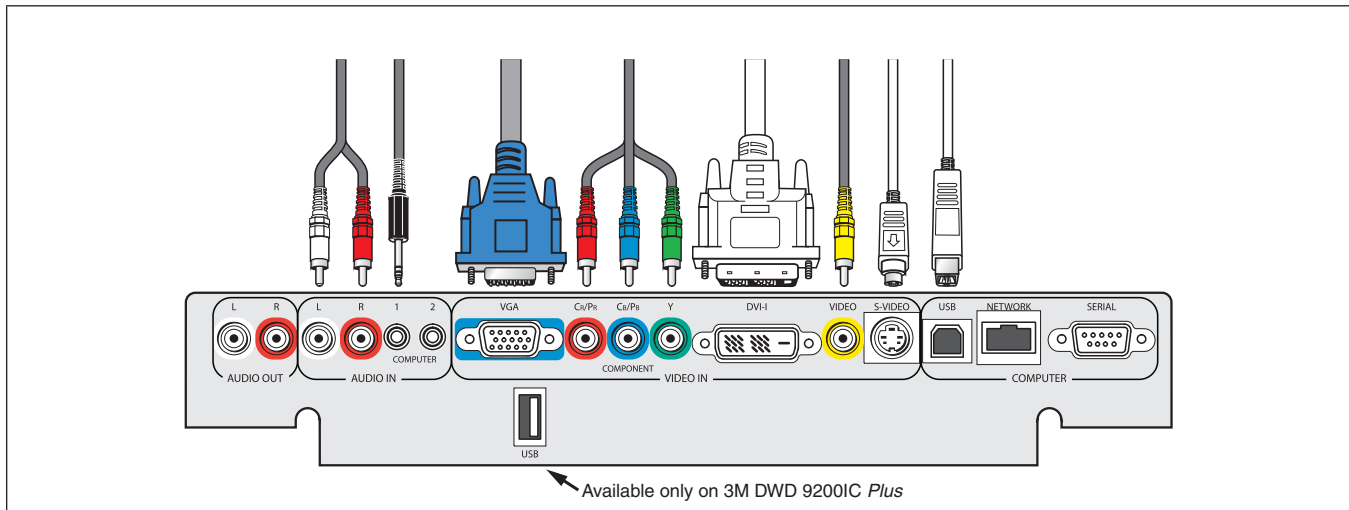


## System Setup

It only takes a few minutes to connect the 3M Digital Wall Display to your computer, VCR, DVD player, videoconference unit, or other devices.

The connection panel is located underneath the bottom right corner of the 3M Digital Wall Display, under the Connection Panel Door. Press and release door to access connection panel.

**Note:** Use the enclosed cables to ensure image and audio quality. Substituting cables of lesser quality may result in poor image quality or audio noise.

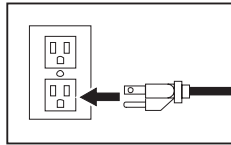


<b>Audio Out</b>	Connects to an external audio amplifier and provides audio from the active audio source.
<b>Audio In</b>	Connects to the audio output of a video device (e.g. VCR or DVD), and provides audio for both DVI, Component, S-Video, and Composite video inputs.
<b>Audio In, Computer</b>	Connects to the computer's audio output and provides audio for VGA and DVI-D (Digital Visual Interface - Digital only) inputs.
<b>VGA</b>	Connects to the VGA or monitor out port of a computer
<b>Component Video</b>	Connects to a component video output device.
<b>DVI-I</b>	Connects to DVI-D (Digital) or DVI-I (Analog) output device. Must configure the DVI EDID and use a DVI-D to analog RGB adapter for analog signals.
<b>Video</b>	Connects to a composite video output device.
<b>S-Video</b>	Connects to a S-Video output device.
<b>USB</b>	Connects to the computer's USB port for mouse control and eBeam™ electronic whiteboard interaction using the 3M Digital Wall Display remote control or the Presentation Pen. (eBeam only on 9200IW/9200IC).
<b>Network</b>	Connects to a network using an ethernet cable.
<b>Serial</b>	Connects to a control device's serial port and provides control of the 3M Digital Wall Display using RS-232C protocol and the specified serial commands.
<b>USB Printer</b>	Connects to an HP or Epson USB-compatible printer. Available only on 3M DWD 9200IC Plus.

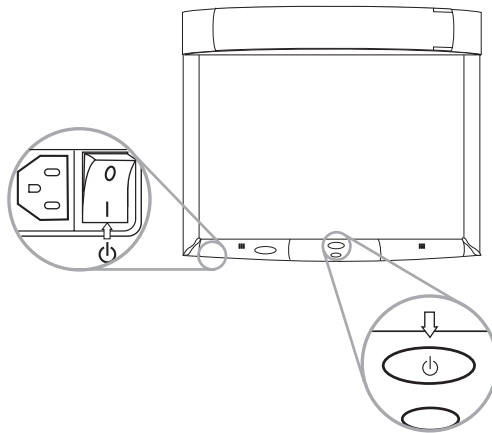
# Operation

## Startup

1. Plug power cord into wall socket.



2. Flip on the **Master Power Switch** beneath the lower left corner of the 3M Digital Wall Display, near the 3M label. This should stay on at all times. Now the 3M Digital Wall Display is in standby mode. The large oval **On/Off Button** will be backlit amber after several seconds.



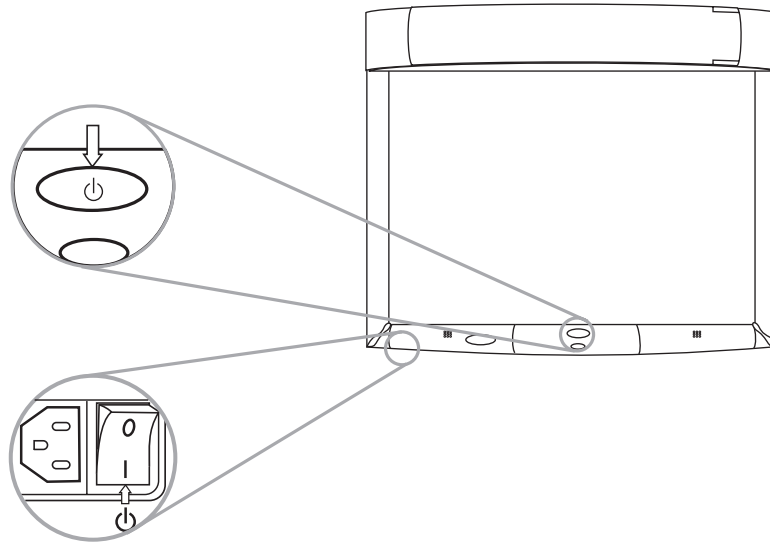
3. Press the **On/Off Button** in the center of the lower front panel. The projection arm will extend outward from its housing at the top of the 3M Digital Wall Display unit. Do not block its movement.
4. When the projection arm is fully extended, the lamp will turn on automatically. It will reach full illumination in approximately 60 seconds. The **On/Off Button** should then be backlit green.

## Shutdown

1. Press the **On/Off Button** on the bottom center panel of the 3M Digital Wall Display unit.
2. The lamp will turn off and the projector arm will return to its housing. The **On/Off Button** will flash red as the arm closes.

*Note: There is a 30-second reset period before the On/Off Button will function again. During this period, the On/Off Button will flash red.*

The fan will continue to run for approximately five minutes to cool the unit.



*Note: If the 3M Digital Wall Display will not be moved or disconnected, leave the Master Power Switch on for your convenience.*

*Do not turn off the Master Power Switch or unplug the power cord before pressing the On/Off Button. After the On/Off Button is pressed, the fan continues for approximately five minutes to cool the 3M Digital Wall Display.*

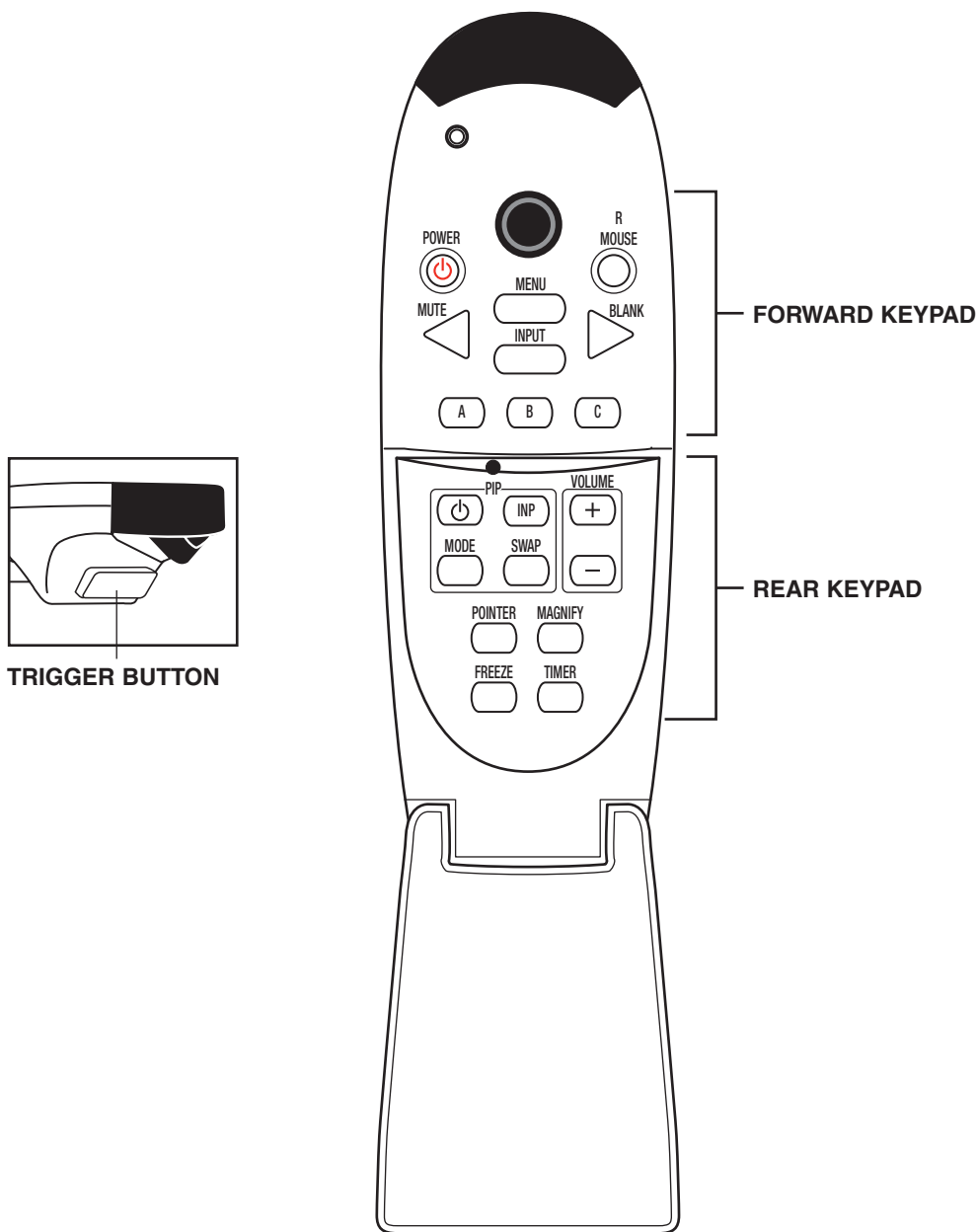
# Remote Control Unit

ENGLISH

## Features

The remote control sensor is on the front lower panel of the 3M Digital Wall Display. The distance between the sensor and remote control must be shorter than 4 meters (13 feet).

The remote control unit has two keypads. The Forward keypad is above the flip-top cover. The Rear keypad is beneath the cover. The **Trigger Button** is underneath the front IR Sensor of the remote control unit and can be pressed easily with the index finger.





## Forward Keypad

<b>Power</b>	Press to turn the 3M Digital Wall Display on/off. When power is turned on, the 3M Digital Wall Display will automatically extend the projection arm and ignite the lamp.
<b>Mute</b>	Press to temporarily turn off the sound. Press again or press the <b>Volume +</b> or <b>-</b> buttons to restore sound.
<b>Direction Knob</b>	Press to: <ul style="list-style-type: none"> <li>• Control the computer's mouse when using the Mouse function.</li> <li>• Adjust values in the onscreen menu system.</li> <li>• Move the Pointer position while using the Pointer function.</li> </ul> While using the onscreen menu system or Pointer function, the computer Mouse function is temporarily disabled. To regain computer mouse control, turn off the menu.
<b>R Mouse</b>	Acts as the right-mouse button when the mouse function is active.
<b>Menu</b>	Press to display the onscreen menu system. Press again to remove the onscreen menu system.
<b>Blank</b>	Press to make the screen go blank. Press again to return to normal display function.
<b>Input</b>	Press to change the source input for the 3M Digital Wall Display. The <b>Input</b> button cycles from Computer, DVI, Component, S-video and Composite Video inputs.
<b>A-B-C Buttons</b>	These buttons can be programmed for additional remote functionality.

## Rear Keypad

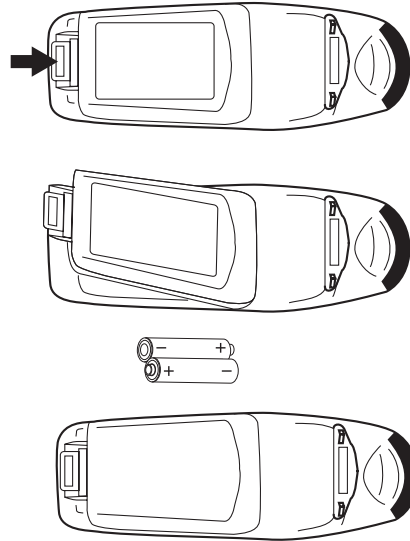
<b>Pointer</b>	Press to turn the pointing function on/off. The pointer can be controlled by using the arrows on the <b>Direction Knob</b> .
<b>Volume</b>	Press the (+) button to increase or the (-) button to decrease the speaker loudness level. When the audio is muted, the <b>Volume (+ or -)</b> buttons will also cancel the Mute function.
<b>Timer</b>	Press to turn the timing function on/off. The timer will display on the screen and begin to count down.
<b>Freeze</b>	A moving image can be stilled or 'frozen' when the <b>Freeze</b> button is pressed. To release the Freeze function, press the <b>Freeze</b> button again.
<b>PIP</b>	The PIP (Picture-In-Picture) function can display two images on the screen at the same time.
<b>Mode</b>	Mode switches the various types of the PIP feature. The modes are: <ul style="list-style-type: none"> <li>• POP (Picutre-Outside-Picture)</li> <li>• PAP (Picture-And-Picture)</li> <li>• PIP (Picture-In-Picture).</li> </ul>
<b>Swap</b>	This switches inputs for the PIP by making the primary input the secondary and making the secondary image the primary.
<b>INP</b>	Changes the input for PIP.

## Trigger Button

On the underside of the remote control unit, beneath the IR sensor, press button for left-mouse-button functions.

## Installing or Replacing Batteries

1. Push and slide the battery compartment tab in the direction shown, then lift it off.
2. Install two AAA batteries as indicated by the diagram inside the compartment.
3. Snap the battery compartment cover back on.



*Note: Avoid excessive heat and humidity. Do not mix old and new batteries or different types of batteries.*

*Note: Recycle or dispose of batteries per local and regional regulations.*



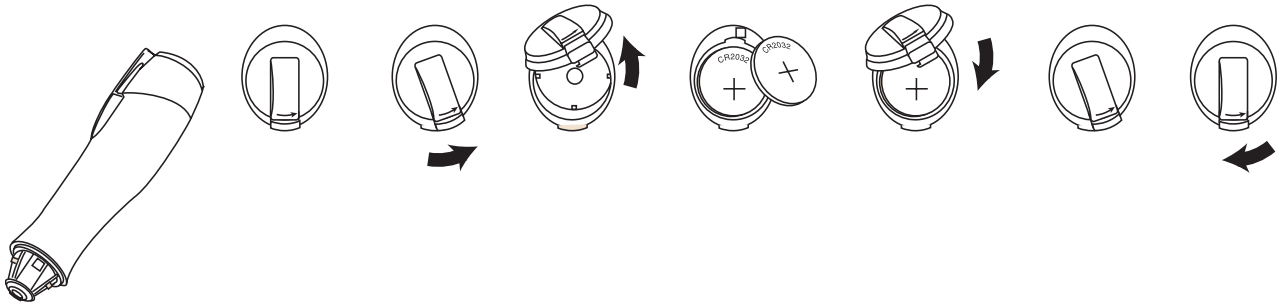
# Digital Markers and Eraser

## Assembling Digital Markers

The 3M Digital Wall Display recognizes dry-erase marker writing by signalling the marker's exact location to the bezel. These signals are created and transmitted by small sensors near the ends of the battery-powered marker sleeves.

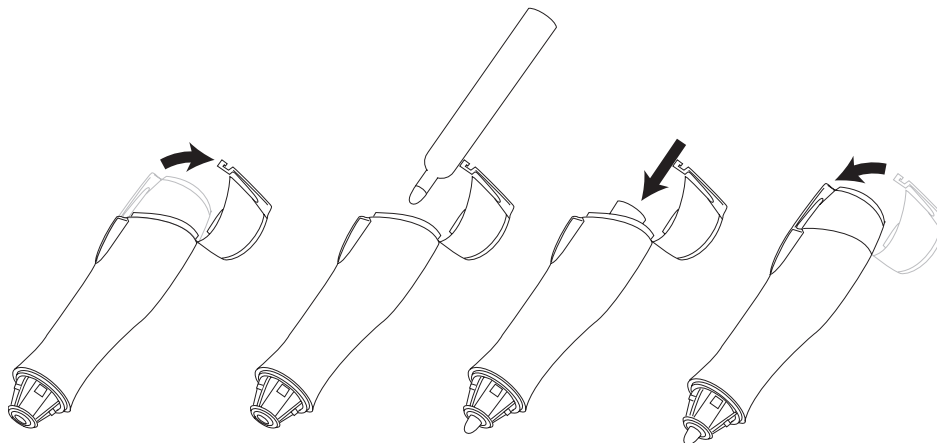
To prepare the digital markers:

1. Unscrew the end cap on the marker sleeve, turning it counterclockwise. Insert two coin batteries (CR2032), with the positive (+) side up. Screw the end cap back on, clockwise.
2. Press the ridged release button on the side of the marker sleeve, beneath the clip, to open the marker compartment.



3. Remove the cap from a bullet-tip dry-erase marker. Be sure the marker color matches the color ring on the marker sleeve. Insert the marker into the eBeam™ sleeve. Close the marker compartment.

**Note:** *The eBeam Software detects the color of the marker sleeve, not the color of the marker inside it, unless specifically changed. Normal pressure on the marker as you write on the 3M Digital Wall Display screen sends a “writing” signal in that sleeve’s designated color.*



4. Cap the marker sleeve to keep the marker tip from drying out, just as you would with any other type of marker. The cap also prevents sending signals when not in use.
5. Repeat steps 1 through 4 for all other marker sleeves.

**Note:** *The signal transmitter in the digital sleeve is located just behind the tip of the marker. Grasp the sleeve by the main barrel so your fingers will not block the signal.*

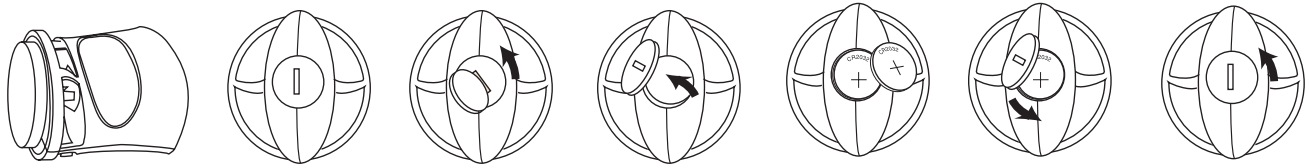
**Note:** *Recycle or dispose of batteries per local and regional regulations.*



## Assembling Digital Eraser

The digital eraser erases marker input by sending signals from the digital eraser in the same way as the digital markers. The eraser sends an “erase” signal when you press the felt eraser against the 3M Digital Wall Display screen.

Remove the battery cover on the top of the digital eraser by twisting a coin counterclockwise in the slot. Insert two coin batteries (CR2032), with the positive (+) side up. Screw the cover back on.



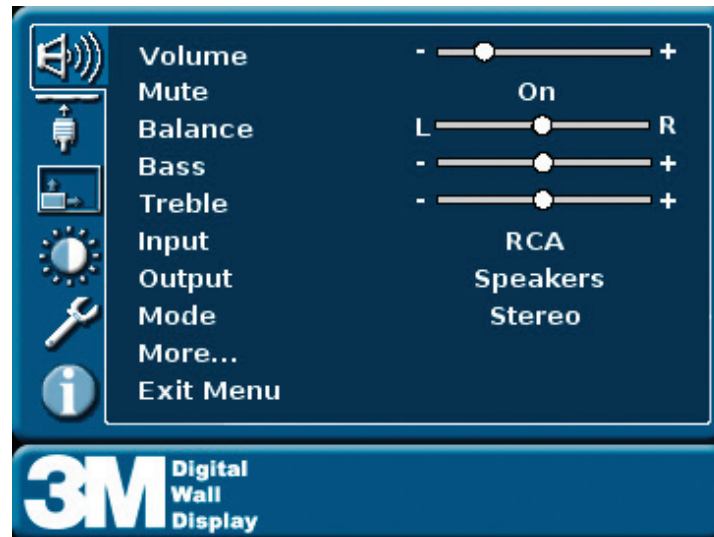
*Note: Recycle or dispose of batteries per local and regional regulations.*



# Menu System

## Menu Navigation

Most adjustments and settings are available in the main menu and sub-menus. To display and navigate the menu press the 3M Digital Wall Display **Menu Keypad** button or the remote control **Menu** button. Use the Menu Keypad arrow buttons or the Direction Knob to move through the menu. Click the Trigger button to change a menu item. Change the menu item by using the Menu Keypad or Direction Pad and then click the trigger to return back to menu navigation.



## Audio

<b>Volume</b>	Adjusts the volume through the speakers.
<b>Balance</b>	Adjusts the volume between the left and right speaker.
<b>Bass</b>	Adjusts the low tones of the audio signal
<b>Treble</b>	Adjusts the high tones of the audio signal.
<b>Input</b>	Changes the input of the displayed image.
<b>Internal Speakers</b>	Set the internal speakers to “Enabled” or “Disable”
<b>Mode</b>	Adjust the audio to “Stereo” or “Mono.”
<b>Reset to Defaults</b>	Sets everything under Audio back to the factory setting.
<b>Exit Menu</b>	Exit out of the menu.

## Video

<b>VGA</b>	Change the displayed image to the VGA source
<b>Component</b>	Changes the displayed image to the Component source
<b>DVI Digital</b>	Changes the displayed image to the DVI digital source or DVI-I analog RGB source.
<b>Composite</b>	Changes the displayed image to the Composite source
<b>S-Video</b>	Changes the displayed image to the S-Video source
<b>Exit Menu</b>	Exit out of the menu

**Picture**

<b>Brightness</b>	Adjust to increase or decrease the brightness of the image
<b>Contrast</b>	Adjust to improve the detail between the black and white
<b>Sharpness</b>	Adjust to smooth out the edges of the image. This is only possible on Composite or S-Video signals.
<b>Hue</b>	Adjust the tint of the image.
<b>Saturation</b>	Adjust the color of the image.
<b>Aspect Ratio</b>	Changes the size of the image.
<b>Location</b>	Adjust to change the vertical, horizontal, height and width of the image.
<b>Keystone</b>	Adjust the horizontal and vertical keystone correction of the image.
<b>Phase</b>	Adjust to eliminate flicker in the image.
<b>Sync</b>	Adjust to eliminate lines in the image.
<b>Reset to Default</b>	Resets everything under Picture back to the factory setting.
<b>Exit Menu</b>	Exit out of the menu.

**PIP**

<b>Active (ON/OFF)</b>	Turns the Picture-In-Picture feature on/off
<b>Video Swap</b>	Switches the video in the primary display (full screen) with that in the secondary display (small screen).
<b>Audio Swap</b>	Switches the audio in the primary display (full screen) with that in the secondary display (small screen).
<b>Mode</b>	Use to change the mode of the PIP to POP (Picture-Over-Picture) and PAP (Picture-And-Picture)
<b>Video Input</b>	Selects the display input for the Picture-In-Picture source
<b>Audio Input</b>	Selects the audio input for the Picture-In-Picture source
<b>Location</b>	Determines the location of the PIP display.
<b>Exit Menu</b>	Exit out of the menu

**Configuration**

<b>Auto Switch Input</b>	Switches the display to the next available input.
<b>Auto Switch PIP</b>	Switches the audio to the next available input.
<b>Auto Shutoff</b>	Turns the unit off at a defined time
<b>Blank Color</b>	Changes the color of the displayed image when the blank button is pushed.
<b>Splash Screen</b>	Use to change the start up screen or the No Input Detect Screen
<b>DVI EDID Select</b>	Select DVI to Digital for a digital source or select DVI to analog for an analog source.
<b>Reset System to Defaults</b>	Resets all menu functions to the default setting.
<b>Information</b>	<p>Displays the following maintenance and servicing information.</p> <ul style="list-style-type: none"> <li>• Lamp Hours: The total time on the lamp</li> <li>• Optical Engine Hours: Total time on the optical engine</li> <li>• System Hours: Total time power has been applied to the 3M Digital Wall Display.</li> <li>• Software Version Number: The version of software on the Display Controller Board</li> <li>• Software Build Number: The build number for the software that is on the Display Controller Board.</li> <li>• DCB Serial Number: Shows the serial number for the 3M Digital Wall Display.</li> <li>• Arm Software Module: Shows the software version for the arm module</li> <li>• I-Port Software Version: Shows the eBeam™ Imageport software version.</li> <li>• IP Address: This displays the IP address for networking via the Ethernet connection.</li> <li>• MAC Address: Displays the MAC address for the 3M Digital Wall Display.</li> <li>• Pod Software Version: Displays the eBeam pod software version for the product.</li> </ul>
<b>On Screen Timer</b>	Selects a time period to count down on the display
<b>Network</b>	<p>Configure the network setting for the unit</p> <ul style="list-style-type: none"> <li>• DHCP: Turn DHCP on/off</li> <li>• IP Address: Set the IP address</li> <li>• MAC: Display the MAC address</li> <li>• Gateway: Set the Gateway for the network</li> <li>• Subnet Mask: Set the Subnet Mask for the network</li> </ul>
<b>Diagnostics</b>	Diagnostics is used only by an authorized service person.
<b>Language</b>	Select the OSD language

# Using the 3M Wall Display as a Copyboard

## Installing eBeam™ Software on Your Computer

### Minimum Requirements

The eBeam Software will run on any computers that meet these minimum criteria:

- Microsoft® Windows® compatible computer with Pentium® 100+ Mhz processor
- Windows 98, 2000, ME, XP and Windows NT 4.0 compatible (other platform users may view shared meetings via Java™ applet through Java-enabled Internet browser)
- 10 MB available hard drive space
- 256-color VGA or SVGA monitor
- CD-ROM drive or Internet connection for software installation
- One available serial port or USB port

### Installing the Software

Installing the eBeam Software for the 3M Digital Wall Display is quick and easy. Just follow these steps below.

1. Insert the CD labeled **3M Digital Wall Display Software and Documentation** into the PC's CD-ROM drive.
2. The CD will automatically display a menu.
3. Select the **Install Software** button to go to the **Install Software** menu.
4. Select the **Install eBeam** button to start the software installation program.
5. The software installation program will guide you through the installation process.

### Copyboard Mode (9200IC Plus)

This mode lets the 3M Digital Wall Display unit capture all the data from the screen and print it to a printer connected directly to the 3M Digital Wall Display. No computer is needed to run this system. This mode should be used without projection.

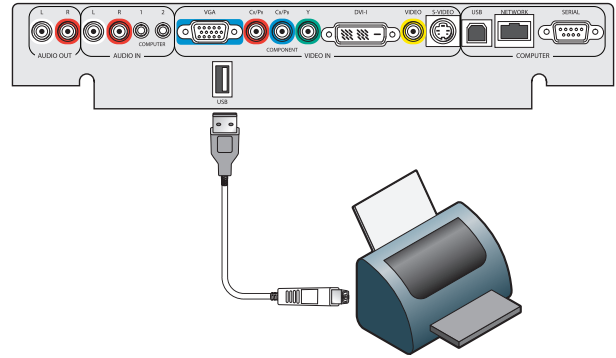
### Projection Mode

The second way to use Whiteboard Display with a computer is in Projection mode. In this mode, your computer's desktop is projected on the 3M Digital Wall Display screen and the Whiteboard system can be used as a touch screen. For this mode, use the eBeam Interactive Stylus instead of the dry-erase markers. The Interactive Stylus is used the same way a mouse is used on a PC (including the right-click function), but the **Print** and **New Page** buttons will have no effect.

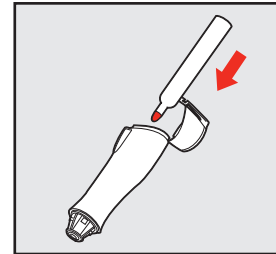


### Using Copyboard Mode (9200IC Plus)

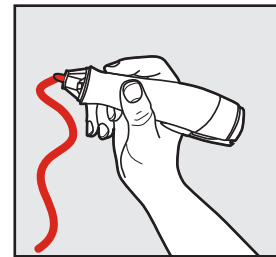
1. Connect a printer USB cable from a printer to USB on the Digital Wall Display. Make sure the **Master Power Switch** is on and that the 3M Digital Wall Display is plugged in. The **On/Off Button** does not need to be turned on.



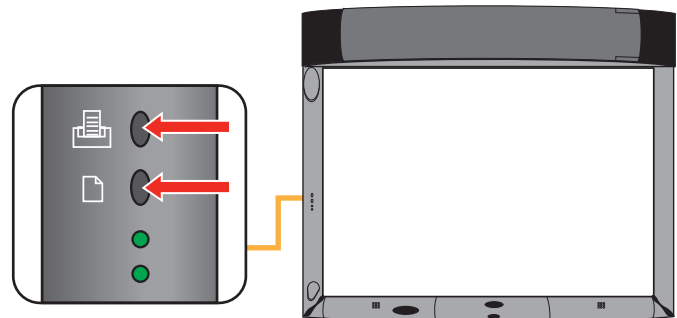
2. Insert a dry-erase marker into the Digital Pen Sleeve.



3. Use the digital marker to write notes on the Digital Wall Display screen.




4. Press the **Print** button to print the notes.
5. Press the **New Page** button to clear notes in memory.



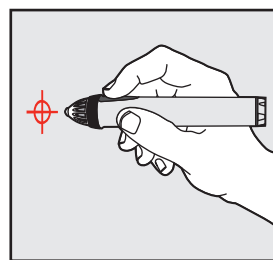
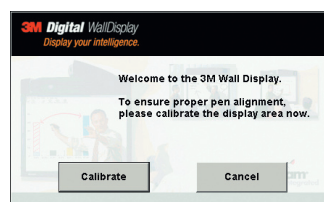
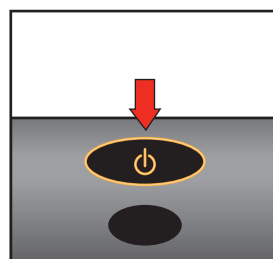
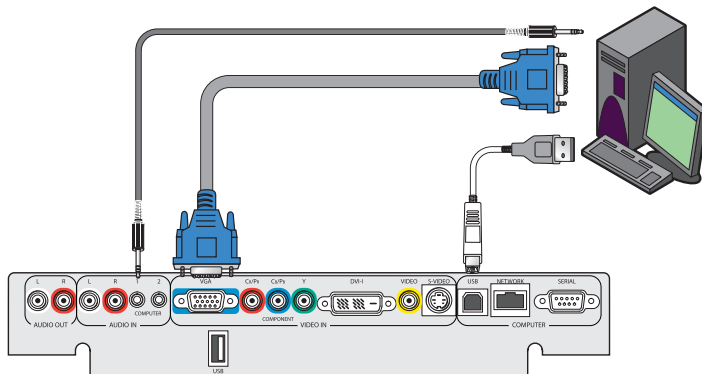
## Using Projection Mode

**Note:** If you do not have the eBeam™ software installed on your computer, you can install it from the 3M Digital Wall Display CD-ROM.

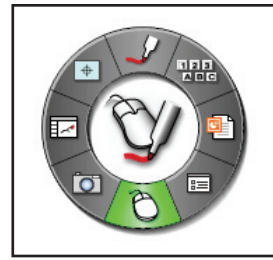
1. Connect the VGA cable from the VGA/Monitor port on the computer to the VGA port on the Digital Wall Display.
2. Connect the USB cable from the USB port on the computer to the Computer-USB port on the Digital Wall Display.
3. Connect the PC audio cable from the headphones jack on the computer to either of the Audio In-Computer jacks on the Digital Wall Display.
4. Press the On/Off button on the Digital Wall Display to turn on the lamp.

**Note:** If you are using a laptop, toggle the display function by using one of the following methods:  
*Fn +  or Fn + LCD/CRT.*

5. Double-Click the eBeam desktop icon on your computer to launch the whiteboard software.
6. Click the Calibrate button in the 3M Digital Wall Display calibrate dialog box.
7. Tap each of the highlighted targets with the interactive stylus.



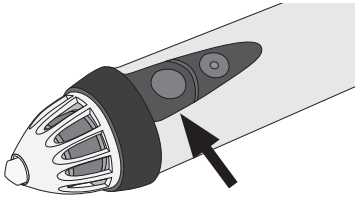
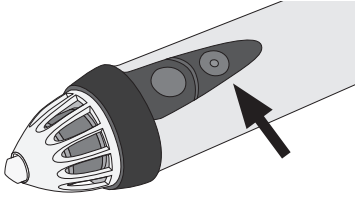
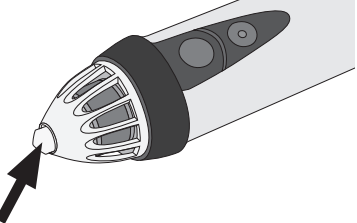
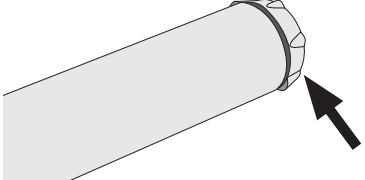
8. Use the eBeam™ annotation tools to annotate your presentation.



## The Interactive Stylus

The eBeam Interactive Stylus was created specifically for use with the 3M Digital Wall Display. The Interactive Stylus behaves exactly like a mouse attached to your computer.

The following table shows the different components of the Interactive Stylus and what those components do.

<b>Button A - Menu Button</b>		Button A, the Menu Button is the equivalent of the right-click button on your mouse.
<b>Button B - Show/Hide Interactive Tools Button</b>		Button B, the Show/Hide Interactive Tools Button shows/hides the eBeam Interactive menu.
<b>Pen Tip</b>		The Pen Tip performs the same action as the left-click button on your mouse.
<b>Battery Cap</b>		The battery cap unscrews counter-clockwise to allow you to insert or replace the AA battery.

**Note:** Recycle or dispose of batteries per local and regional regulations.



To learn more about the eBeam Software for the 3M Digital Wall Display, please refer to the *eBeam Software for 3M Digital Wall Display Operator's Guide*.

# Maintenance

## General Maintenance

For general cleaning of the screen and exterior of the 3M Digital Wall Display, use a damp cloth or dry cleaning cloth such as the 3M High Performance Cleaning Cloth.

Standard dry-erase cleaners may be used on the dry-erasable screens, such as Sanford® Expo® Whiteboard Cleaner. Do not use other spray cleaners or solvents on any part of the 3M Digital Wall Display.



## Lamp Usage

### Use and Replacement of Lamp

The 3M Digital Wall Display lamp has a normal operating time of approximately 1600 hours, called the lamp life. After the lamp has been operating for 1400 hours or longer, the following messages will appear on the screen for the first three minutes of operation. When this happens, turn off the 3M Digital Wall Display and replace the lamp with a new one. Using an old lamp in the 3M Digital Wall Display could cause a malfunction.

### Onscreen Lamp Messages

#### PLEASE CHANGE THE LAMP

The lamp has been in use for 1400–1499 hours and needs to be changed. After replacing the lamp, reset the lamp timer.

#### THERE ARE (x) HOURS OF LAMP LIFE REMAINING

#### THE Wall Display WILL SHUT OFF IN 40 MINUTES

The lamp has been in use for 1500–1579 hours, and the power will turn off after 40 more minutes. After replacing the lamp, reset the lamp timer.

#### THERE ARE (x) HOURS OF LAMP LIFE REMAINING

#### THE Wall Display WILL SHUT OFF IN 5 MINUTES

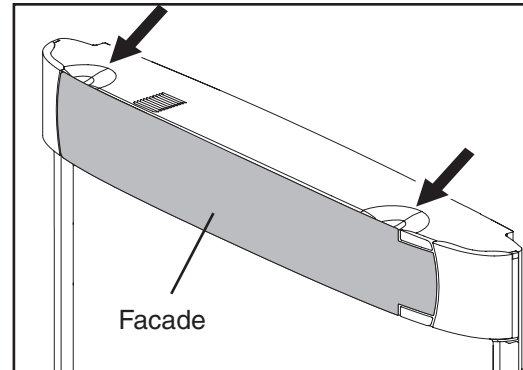
The lamp has been in use for more than 1580 hours, and the power will automatically turn off after 5 minutes. After replacing the lamp, reset the lamp timer.

All of these messages will display for no longer than three minutes, but each will display whenever you turn the lamp on again, until the lamp is replaced.

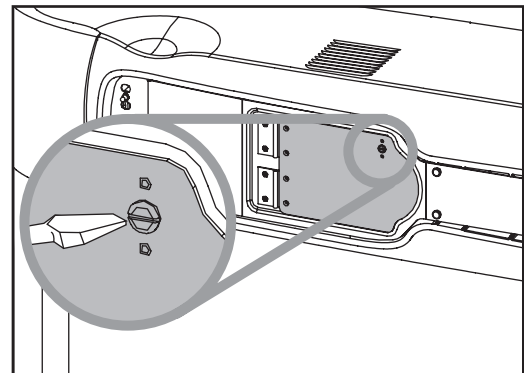
For lamp-changing instructions, please refer to the next page.

## Lamp Replacement

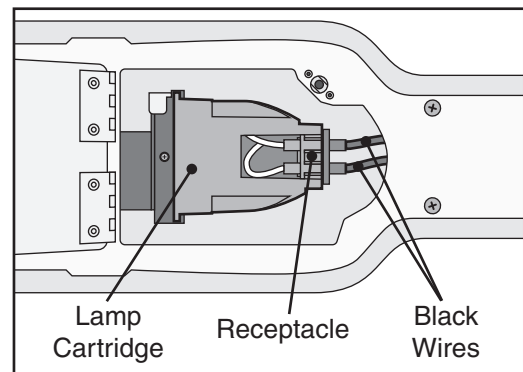
1. Turn the power off and disconnect the power cord from the outlet.
2. Allow approximately 45 minutes for the lamp to cool, if necessary.
3. There are two indentations behind the top of the facade, near each end. Grasp facade plate at each indentation and pull out and down to remove plate.



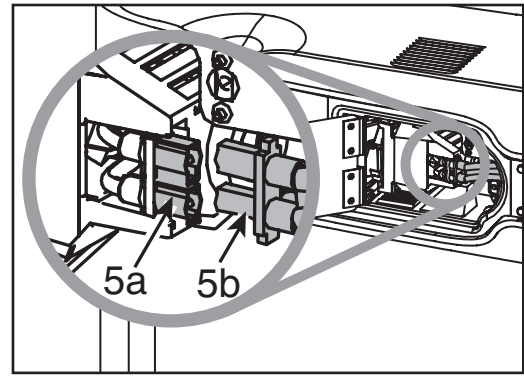
4. Loosen the self-contained screw at the upper righthand corner of the lamp housing door with a standard screwdriver.



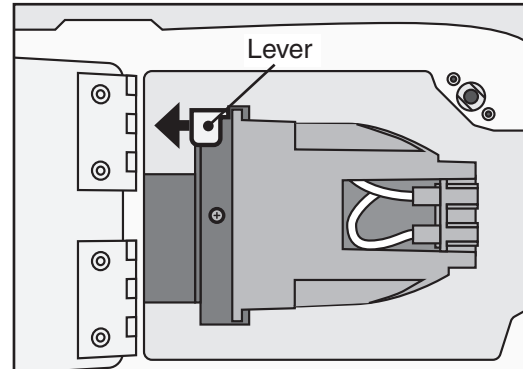
5. Two black wires connect to the lamp cartridge by a black plastic receptacle on the right side of the lamp cartridge.



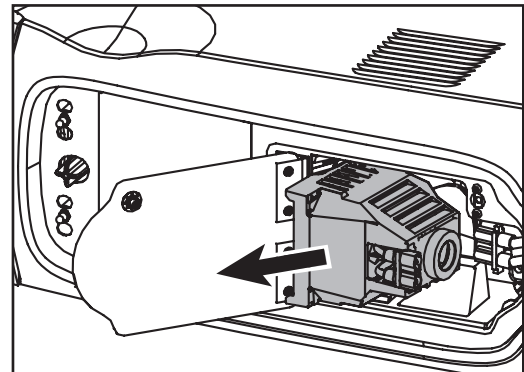
5a. Hold down this receptacle with your left thumb and (5b) pull connectors out of the receptacle with other hand.



6. Open the latch by moving the metal lever to the left.



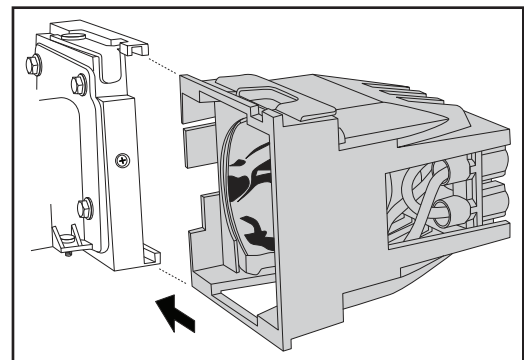
7. While holding the latch open, grasp the lamp cartridge and pull it straight out of the lamp compartment.



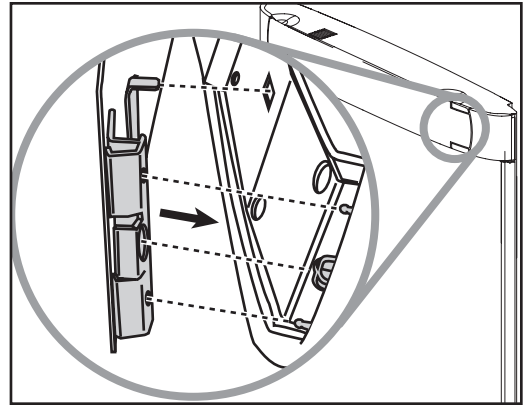
8. Holding the latch open, slide the new lamp cartridge into place.

9. Reconnect black wires to the receptacle.

10. Close the lamp housing door and tighten the screw.

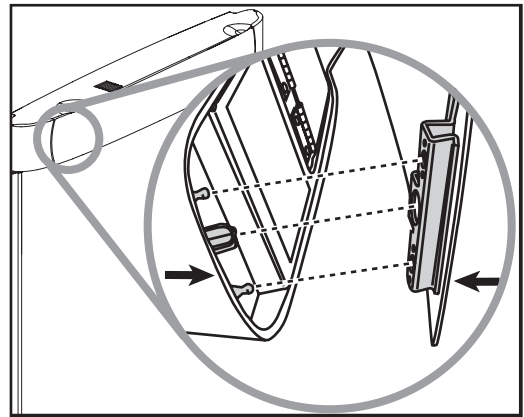


11. Align the slots and tabs of the right side of the facade and projection arm as shown, then snap firmly into place.



12. Align the slots and tabs of the left side of the facade and projection head as shown, then snap firmly into place.

**Note:** You must hear or feel a distinctive snap to ensure facade is securely attached.



Whenever the lamp is replaced, please reset the total lamp operating time. (Refer to next page.)

## Resetting Lamp Hours

Please do the following within 10 minutes of turning power on after you replace the lamp.

1. Press the **Menu Keypad** or the **Menu** button on the remote control and use the **Direction Knob** to scroll down to the **Tools** menu.
2. In the **Tools** menu, scroll down the pop-up list to **Usage/Hrs** to display the total operating time of the lamp.
3. Select **Lamp Reset** from the next pop-up list.
4. Select **Exit**.

*Note: Do not reset the lamp hours if the lamp cartridge was not changed. This can damage internal components.*

*Important Note: This lamp contains mercury. Don't throw lamp cartridge in the trash. Dispose of the lamp cartridge in accordance with your respective governmental agencies for hazardous waste. For disposal information in the US, contact the Electronic Industries Alliance at [www.lamprecycle.org](http://www.lamprecycle.org). In Canada contact the Electronic Product Stewardship Canada at [www.wpsc.ca](http://www.wpsc.ca).*

## Fan Screen Cleaning

The 3M Digital Wall Display has two screens located outside of the lamp cooling fans. The cooling fans are positioned above and beneath the lamp. The fan screen above the lamp should be cleaned every 1000 hours to prevent dust buildup and ensure proper operation of the 3M Digital Wall Display.

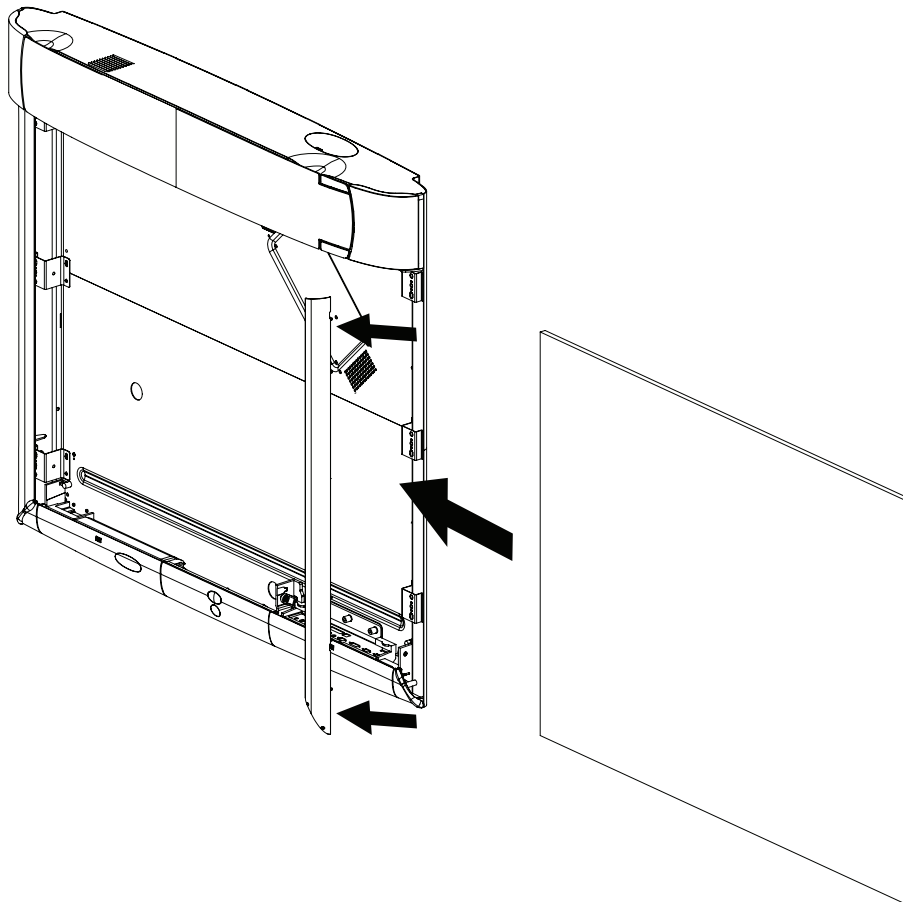
1. To clean the upper screen, remove the façade, open the lamp door and remove the lamp.
2. Position the compressed air nozzle so that airflow comes in from the air vents above the lamp section.
3. Blow compressed air through the vents so that the air stream is pushed out the lamp door, forcing any dust buildup to blow out the lamp door. A 10-oz. can of compressed air or gas duster should be used for cleaning the screens.



## Replacing Projection Screen

Replacing the 3M Digital Wall Display screen is very simple.

1. Turn off the 3M Digital Wall Display and disconnect the power cord from the wall outlet.
2. Remove the right and left side bezels. There are two ways to remove it. Either snap it off or insert a screwdriver into the notch located on the sides of each bezel, near the top. The bezel will easily snap on and off for screen replacement.
3. Slide the screen straight out of the open side. Be sure to allow approximately 4 feet of clear space on either side of the 3M Digital Wall Display to do this.
4. Insert new screen into the open side and slide into place. Ensure that the screen is centered before replacing the side bezels. The bezels have ribs on the inside that could damage the screen if it is not centered.
5. Insert the bottom of the bezel first, then snap bezel back into place.

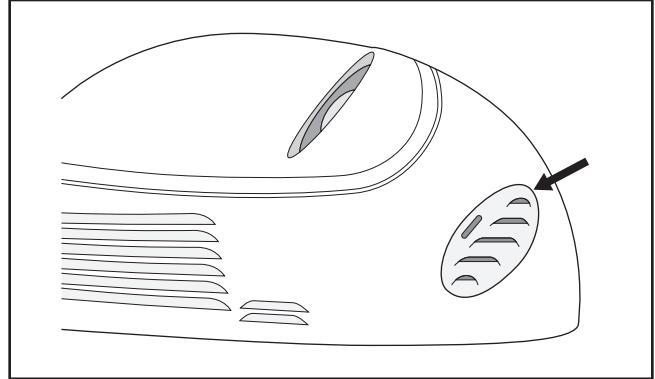


## Optical Engine Adjustment

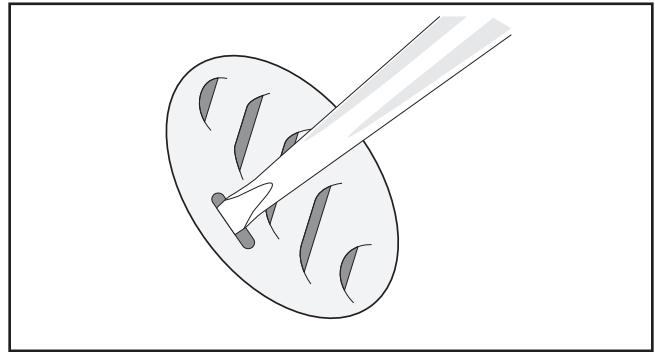
The optical engine needs to be aligned when the vertical or horizontal images do not cover the screen or are tilted.

**Note:** Before continuing with this adjustment, move the arm assembly up and down to relieve any stress and see if the arm will realign itself and project an aligned image.

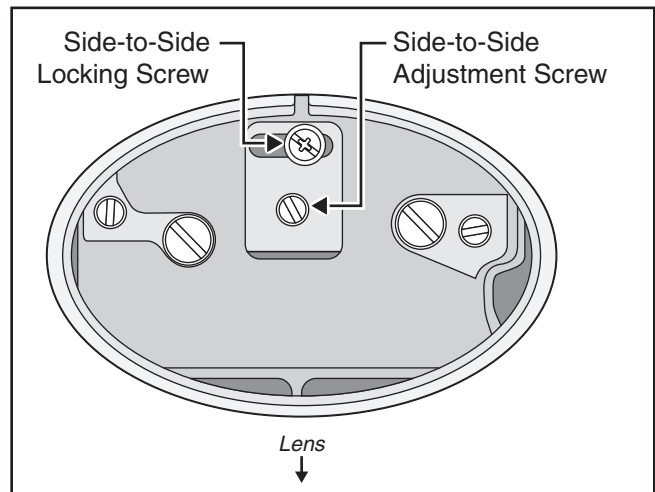
1. Locate the access door on the under side of the projection arm.



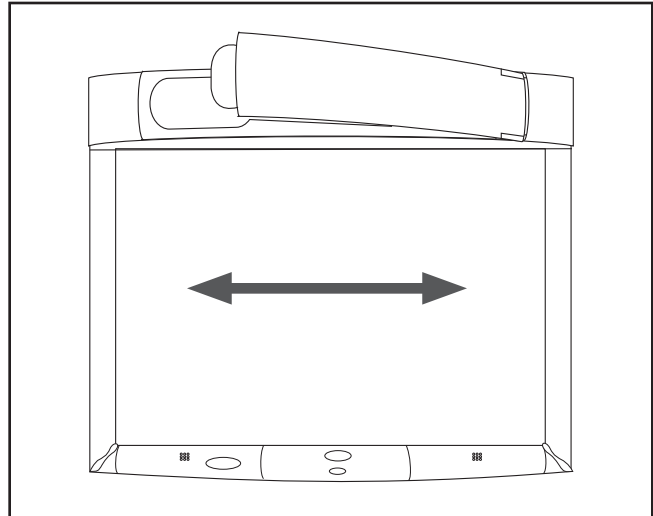
2. Slide the door release catch to the open position using the blade of a small screwdriver. Carefully lift outward to remove the optical engine door.



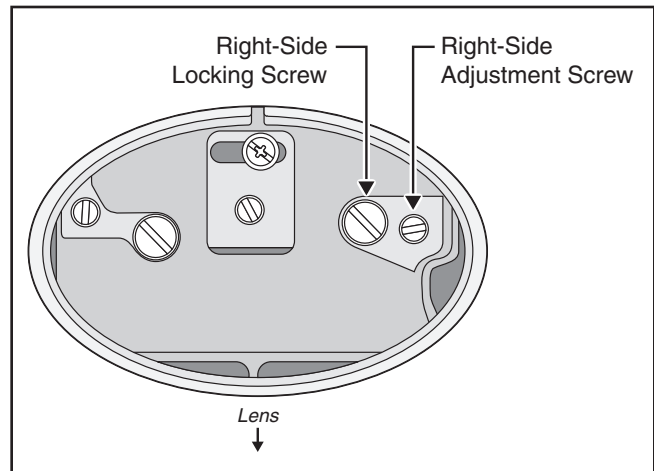
3. Locate adjustment screw for side to side screen adjustment. Locate locking screw for side to side adjustment.



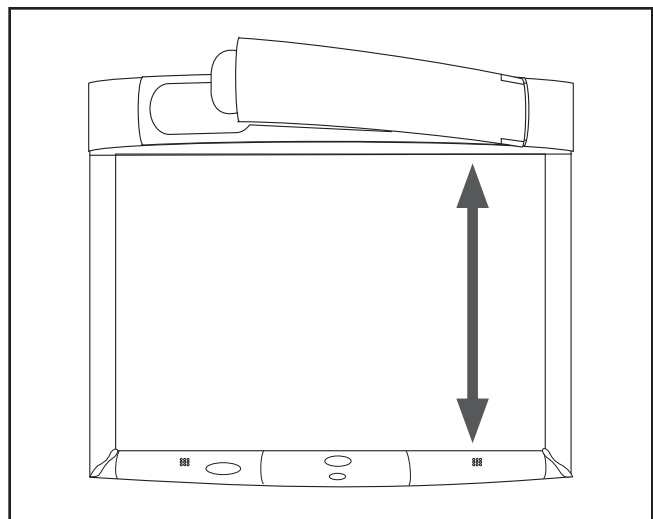
- Loosen locking screw. Then use blade screwdriver on adjustment screw to move screen image from side to side if required. Tighten locking screw.



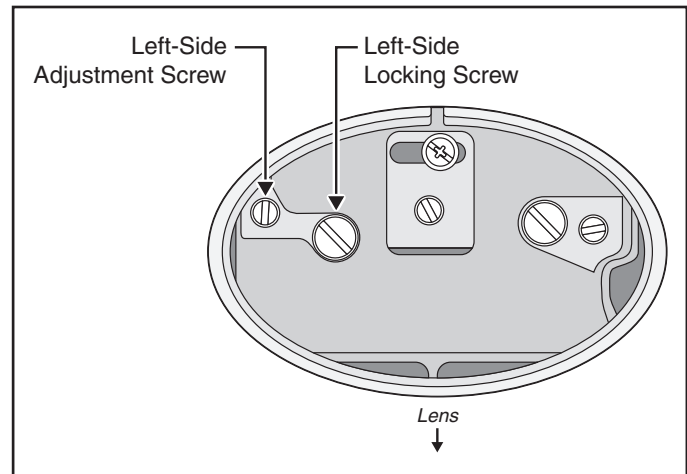
- Locate adjustment screw for right side screen adjustment. Locate locking screw for right side adjustment.



- Loosen locking screw. Then use blade screwdriver on adjustment screw to move right side screen image up and down if required. Tighten locking screw.

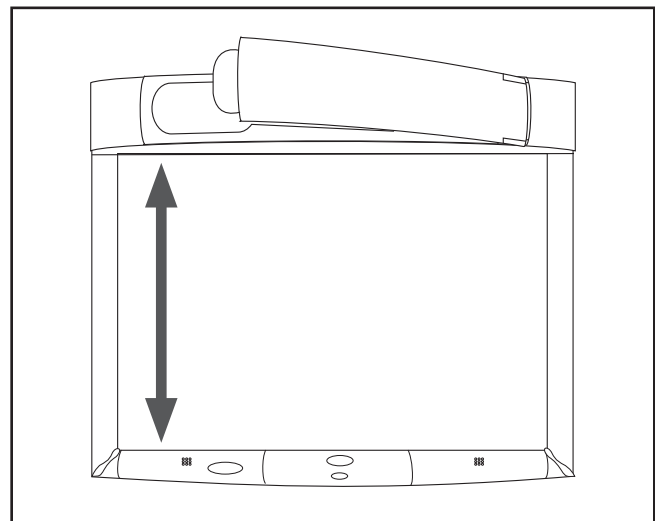


7. Locate adjustment screw for left side screen adjustment. Locate locking screw for left side adjustment.



8. Loosen locking screw. Then use blade screwdriver on adjustment screw to move left side screen image up and down if required. Tighten locking screw.

**Note:** After making adjustments it may be necessary to perform the side to side adjustment to center the image properly.



9. Replace the optical adjustment door.

# Troubleshooting

## Common Problems and Solutions

Symptom	Cause	Solution
Power cannot be turned on.	The power cord is disconnected.	Insert the power cord into an AC socket.
	The <b>Master Power Switch</b> is not turned on.	Turn on the <b>Master Power Switch</b> .
	The arm facade is not in place.	Make sure the arm facade is in place.
No picture or sound	The desired input source is not selected.	Press the remote control Input button to select a desired input source.
	The cables from the input source are not connected.	Connect the cable to correct input source.
	The input source is not turned on or not displaying an image. (e.g. If a notebook computer, the external monitor port is not turned on.)	Turn on input source
The lamp will not ignite or has turned off.	The internal temperature is too high.	Clean the cooling fan screen.
	The lamp has reached maximum life or has prematurely failed.	Replace lamp.
The projection arm opens, then closes.	The lamp will not ignite.	Replace lamp.
Sound is heard with no picture.	The VGA/Video cables are not connected.	Connect the cables to the correct input source.
	The VGA/Video/Audio cables are connected to the wrong input.	
Picture is displayed with no sound	The audio cables are connected to the wrong input. Check the audio/video configuration	Connect the cables to the correct input source. Ensure proper configuration through the menu
	The volume is set to Minimum.	Turn up <b>Volume</b> .
	The <b>Mute</b> is on.	Turn off <b>Mute</b> .
Picture is dark or dim.	The brightness setting is too low.	Adjust the brightness
	The lamp needs to be replaced.	Replace lamp
Desired input source cannot be detected.	The input source is not active. A signal must be present for the input to be selected.	Connect an active input source to unit.
	The input device (e.g. computer, DVD player, etc.) is not turned on.	Turn on input source

### Common Problems and Solutions

Symptom	Cause	Solution
The remote control does not work	The remote control is not facing the remote control sensor.	Face the remote control toward the remote control sensor.
	The remote control is too far from the sensor.	Operate the remote control within 5 meters.
	An obstruction is between the remote control and the sensor.	Remove obstacle.
	The remote control's batteries are exhausted or inserted wrong	Correctly insert batteries

### Onscreen Messages

Message	Meaning
No input is detected	3M Digital Wall Display is not receiving a signal from an external source. Check the cable connections and verify power is on and external source is working.
Please change the lamp	The lamp has 1400–1499 hours on it and needs to be changed.
There are (x) hours of lamp life remaining. The Wall Display will shut off in 40 minutes	The lamp has 1500–1579 hours on it and needs to be changed.
There are (x) hours of lamp life remaining. The Wall Display will shut off in 5 minutes	When the lamp has 1580 hours or more on it, the message will flash, and the power will turn off after 5 minutes.

## eBeam™ Software

Troubleshooting provides solutions for known issues with the eBeam system. This section covers the Microsoft® Windows® versions of eBeam Software.

### eBeam Hardware Detection/Use

Message	eBeam	Try the following:
<p>“eBeam not found. Check connection cable and power supply.”</p> <p>(This message might appear at application startup, or during the course of a meeting.)</p>	Software	<ul style="list-style-type: none"> <li>• First check the hardware for your system as described, and then click <b>Cancel</b>.</li> <li>• See <b>Unable to Detect the Hardware</b>.</li> <li>• Do you have more than one copy of eBeam Software installed on your computer? If so, the other copy may be running and have control of the port. Shut down the other copy. We recommend that old versions of eBeam Software be uninstalled from your computer.</li> <li>• Exit the eBeam Software’s Meeting application and restart it.</li> <li>• Check that the eraser is not resting on the eraser pad.</li> <li>• If you are using a Serial-to-USB connector, follow the manufacturer’s setup instructions.</li> </ul>
<p>Status Line Message. “Could not autodetect eBeam Hardware.” or “Could not connect to eBeam Hardware on X.” (where X is a port)</p> <p>(This message would most likely occur when you have selected <b>Cancel</b> from the <b>eBeam not found</b> message dialog box.)</p>	Software	<ul style="list-style-type: none"> <li>• See <b>“eBeam not found.”</b> Check connection cable and power supply. (This message might appear at application startup or during the course of a meeting.)</li> <li>• See <b>Unable to Detect the Hardware</b>.</li> </ul>
<p>“The eBeam hardware is currently used by Projection mode. Would you like to use the eBeam hardware for this application?”</p> <p>(This message might appear at application startup or after selecting <b>Whiteboard Mode</b>.)</p>	Software	<ul style="list-style-type: none"> <li>• Message displayed if you are trying to open or switch to eBeam Software’s Meeting application from Projection mode.</li> </ul>

**Network Connection/Shared Meetings**

Problem	eBeam	Try the following:
<p>To share a meeting, the eBeam™ Hardware must be connected and detected.” (This message appears when you choose <b>Shared Meeting</b>.)</p>	<p>Software</p>	<ul style="list-style-type: none"> <li>• To serve as the meeting host, your computer must be attached to the eBeam Hardware. See <b>Hosting/ Sharing a Meeting</b>.</li> </ul>
<p>Unable to share or join a meeting over the EFI meeting server.</p>	<p>Software</p>	<ul style="list-style-type: none"> <li>• If you are attempting to share a meeting, make sure that you have the eBeam Hardware connected. See <b>Hosting/ Sharing a Meeting</b>.</li> <li>• If your network/Internet connection is behind a firewall or proxy server, you will have to set up the proxy server. See <b>Proxy Server Setup</b>.</li> </ul>
<p>Using a cable modem or DSL and unable to share or join a meeting over the EFI meeting server.</p>	<p>Software</p>	<ul style="list-style-type: none"> <li>• If you are attempting to share a meeting, make sure that you have the eBeam Hardware connected. See <b>Hosting/ Sharing a Meeting</b>.</li> <li>• If your network/Internet connection is behind a firewall or proxy server, you will have to set up the proxy server. See <b>Proxy Server Setup</b>.</li> </ul> <p>Even if you think you aren't behind a proxy server/ firewall, you might be. Your ISP might have a firewall set up, causing this problem. Try:</p> <ul style="list-style-type: none"> <li>• Add a new server (see <b>Adding a Meeting Server</b>) with a DNS: meetings.e-beam.com, and port: 443.</li> <li>• This option is only available in version 2.1 and later. Newer versions of the software automatically attempt to connect through port 443, but it may be necessary to manually set up the server as described previously.</li> </ul>
<p>Unable to see shared meeting names in the <b>Join Meeting</b> dialog box.</p>	<p>Software</p>	<ul style="list-style-type: none"> <li>• When the meeting host shares the meeting through the <b>Share Meeting</b> dialog box (see <b>Hosting/ Sharing a Meeting</b>), they can select whether or not to publish the meeting name. if the meeting name is published, then it will show up in the <b>Join Meeting</b> dialog box. if the meeting name is not published, then other meeting participants must manually type the meeting name into the meeting name text box.</li> <li>• To publish the meeting name, make sure that the <b>Publish meeting name</b> check box in the <b>Share Meeting</b> dialog box is checked.</li> <li>• Does your intranet have a proxy server/firewall? Most intranets do. If you have not done so, enable your proxy server. See <b>Proxy Server Setup</b>.</li> </ul>
<p>How to set up the proxy server?</p>	<p>Software</p>	<ul style="list-style-type: none"> <li>• See <b>Proxy Server Setup</b>.</li> </ul>



## Writing Data/Capture

Problem	eBeam	Try the following:
Software states that the eBeam™ hardware is detected, but writing does not appear in eBeam Software's Meeting application Active Page.	Hardware	<ul style="list-style-type: none"> <li>• Press the digital marker down on the whiteboard. If you do not hear a faint buzzing, replace the batteries.</li> <li>• Try another digital marker. If the other digital marker works, replace the batteries in the digital marker sleeve that does not work.</li> <li>• Make sure you are not holding the sleeve too close to the tip of the digital marker. This blocks the signal.</li> </ul>
	Software	<ul style="list-style-type: none"> <li>• Choose <b>eBeam Hardware &gt; Detect eBeam Hardware</b> from the eBeam Software's Meeting application <b>Tools</b> menu and then check the status line. If it states that the hardware is not detected, see <b>Manually Detecting the eBeam Hardware</b>.</li> </ul>
Software is missing many of the strokes written with the digital marker.	Hardware	<ul style="list-style-type: none"> <li>• Press the digital marker down on the whiteboard. If you do not hear a faint buzzing, replace the batteries.</li> <li>• Make sure you are not holding the sleeve too close to the tip of the digital marker. This blocks the signal.</li> <li>• Make sure that you are pressing the digital marker firmly against the 3M Digital Wall Display when you write. The marker is designed to write with a normal amount of pressure by the writer; however, it is possible to write so softly that the marker does not send out a signal.</li> </ul>
Digital marker strokes are shown in eBeam Software's Meeting application in the wrong color.	Hardware	<ul style="list-style-type: none"> <li>• Make sure you are using the correct color digital marker sleeve. The color of the digital marker sleeve is shown on a color ring located near the tip of the digital marker.</li> </ul>
	Software	<ul style="list-style-type: none"> <li>• Check the color set for the sleeve in the <b>Sleeve Settings</b> dialog box (see <b>Setting Pen Colors/Line Thickness</b>). It is possible to set a different color in the software for any eBeam digital marker.</li> </ul>
Digital marker strokes made at the bottom of the whiteboard do not appear in eBeam Software's Meeting application.	Hardware	<ul style="list-style-type: none"> <li>• Press the digital marker down firmly on the whiteboard. If you do not hear a faint buzzing noise, replace the batteries.</li> <li>• Make sure you are not holding the digital marker too close to the tip. This blocks the signal.</li> <li>• Make sure that you are pressing the marker firmly against the whiteboard when you write. The marker was designed to write with a normal amount of pressure by the writer; however, it is possible to write so softly that the marker does not send out a signal.</li> </ul>

### Writing Data/Capture

Problem	eBeam	Try the following:
Digital marker strokes made at the bottom of the whiteboard do not appear in eBeam™ Software's Meeting application.	Software	<ul style="list-style-type: none"> <li>• Make sure you are writing within the calibrated image area on the whiteboard.</li> </ul>
Digital eraser does not erase.	Software	<ul style="list-style-type: none"> <li>• Press the eraser down on the whiteboard. If you do not hear a faint buzzing noise, replace the batteries.</li> <li>• Choose <b>eBeam Hardware &gt; Detect eBeam Hardware</b> from the eBeam Software's Meeting application <b>Tools</b> menu and then check the status line.</li> </ul>

## EFI Meeting Applet

Problem	eBeam	Try the following:
Applet does not load.	Software	<p><b>Microsoft® Internet Explorer®</b></p> <ul style="list-style-type: none"> <li>• In Internet Explorer, go to <b>Tools &gt; Internet Options</b>. Click the <b>Security</b> tab, and then click <b>Restricted Sites</b>. Click the <b>Custom Level</b> button, and then scroll down the list to <b>Microsoft VM</b>. Make sure that <b>Disable Java</b> is not selected. Attempt to open the applet again.</li> <li>• In Internet Explorer, go to <b>Tools &gt; Internet Options</b>, and click the <b>Delete Files</b> button. Attempt to open the applet.</li> </ul> <p><b>Netscape®</b></p> <ul style="list-style-type: none"> <li>• In Netscape, go to <b>File (or Edit) &gt; Preferences</b>. Click the <b>Advanced</b> option, and make sure that <b>Enable Java</b> is checked.</li> <li>• In Netscape, go to <b>File (or Edit) &gt; Preferences</b>. Click the <b>Advanced</b> option, and then click <b>Cache</b>. Click both the <b>Clear Memory Cache</b> and <b>Clear Disk Cache</b> buttons. Attempt to reopen the applet.</li> </ul>
While using iVISTA, the applet does not load.	Software	<p>iVISTA and eBeam™ Software's Meeting application both use port 80 as the default connection port. Try hosting the eBeam meeting over port 81 or some other port value. Try:</p> <ul style="list-style-type: none"> <li>• From the <b>Share Meeting</b> dialog box (see <b>Hosting/ Sharing a Meeting</b>), select <b>Use my PC to host this meeting</b>, then type <b>81</b> in the <b>Port</b> text box.</li> <li>• Participants attempting to log in to the meeting should type <b>http://meeting_name:81</b>, where meeting_name is the name entered in the <b>Meeting Name</b> text box, and 81 is the port value you have entered.</li> </ul>
Unable to see shared meeting names in the <b>Join Meeting</b> dialog box.	Software	<ul style="list-style-type: none"> <li>• When the meeting host shares the meeting through the <b>Share Meeting</b> dialog box (see <b>Hosting/ Sharing a Meeting</b>), they can select whether to publish the meeting name. If the meeting name is published, it will show up in the <b>Join Meeting</b> dialog box. If the meeting name is not published, then other meeting participants must manually type the meeting name into the <b>Meeting Name</b> text box.</li> <li>• To publish the meeting name, make sure that the meeting host checked the <b>Publish Meeting Name</b> check box in the <b>Share Meeting</b> dialog box.</li> <li>• Does your intranet have a proxy server/firewall? Most intranets do. If you have not done so, enable your proxy server. See <b>Proxy Server Setup</b>.</li> </ul>

**Background Images**

Problem	eBeam	Try the following:
Microsoft® Excel® spreadsheet did not load properly.	Software	<ul style="list-style-type: none"> <li>• Is there a graph in the spreadsheet? eBeam™ Software's Meeting application cannot import a spreadsheet containing a graph.</li> <li>• See <b>Loading an Excel Spreadsheet as a Background Image.</b></li> </ul>
Background image quality is bad.	Software	<ul style="list-style-type: none"> <li>• Background images that are sent to the applet meeting viewer are highly compressed to make the image faster to download. Using the eBeam Software's Meeting application is better if you wish for background images to be easy to view.</li> </ul>

# Service Information

## Replacement Parts

Description	Part Number
Power Cord (EU)	78-8131-0004-3
Power Cord (US)	78-8131-0005-0
Power Cord (UK)	78-8131-0003-5
Serial Mouse Cable	26-1015-0423-6
USB Cable	26-1015-0424-4
VGA Cable	26-1015-0425-1
DVI-D Cable	26-1015-0418-6
PC Audio Cable	26-1015-0420-2
S-Video Cable	26-1015-0422-8
Replacement Lamp	78-6969-9736-6
Remote Control Unit	78-8120-4497-8
Macintosh Adapter	26-1015-0419-4
3-Conductor Video/Audio Cable	26-1015-0421-0
Easy Erase Screen	78-6969-9469-4
3M Vikuiti High Brightness Screen	78-6969-9471-0

## Optional Accessories

Accessory Tray (right side)	78-6969-9753-1
Accessory Tray (left side)	78-6969-9754-9

## Ordering Parts or Getting Information

For product information, product assistance, service information, or to order accessories, please contact 3M Customer Service at the following numbers:

- In U.S. or Canada: **1-800-328-1371**
- In other locations, contact your 3M Sales office.

The contents of this manual are subject to change without prior notice.

3M assumes no responsibility for the infringement of special rights of a third party or other rights that may arise out of the information contained in this manual.

Reproduction of this manual in any form without prior permission is strictly prohibited.

# Appendix

## 3M™ Digital Wall Display Specifications

ENGLISH

Display Size		60" Diagonal viewing area
Display Aspect Ratio		4:3
Display System		Single Chip, DLP™ Texas Instruments technology
DLP Chip	Chip Diagonal Size	0.7 inch
	Number of Pixels	1024 x 768 pixels
Color		24-bit full color
Contrast Ratio		150:1
Dimensions		47.6" H x 53.2" W x 7.0" D (1208 mm x 1350 mm x 179 mm)
Weight		Approx. 85 lbs.
Video Compatibility		NTSC, NTSC 4.43, PAL, PAL-N, PAL-M, SECAM, 480p, 720p, 1080i
Computer Video Compatibility		VGA to SXGA
Mouse Emulation		USB
Input/Output Terminal	Computer Input Signals	Analog RGB: 15-pin mini D-Sub
		Digital RGB: DVD-D
		Analog RGB: DVI-I w/Adapter
	Video Input Signals	Audio: 3.5 mm stereo mini-jack
		Component Video: RCA x3
		S-Video: Mini DIN 4-pin
	Composite Video: RCA x1	
	Audio Out	RCA jacks
	RS-232 Control Port	9-pin D-Sub
	Mouse Emulation Port	USB
Network	RJ45	
Audio System	Amplifier (to speakers)	20 Watts per channel
	Speakers	40 Watts Max., 8 ohms
Power Requirements		100~240 VAC, 50/60 Hz, 400 Watts Max.

**Input/Output Signal Specifications**

Computer	Video Signal		Analog 0.7Vp-p, 75 Ohms termination (positive polarity)
	Horizontal Sync Signal		TTL Level (positive/negative polarity)
	Vertical Sync Signal		TTL Level (positive/negative polarity)
	Audio Input Signal		200m Vrms, 20k Ohms (Max 3.0Vp-p)
	Audio Output Signal		0~200m Vrms, 1k Ohms
Video	S-Video	Luminance Signal	1.0Vp-p, 75 Ohms
		Chrominance Signal	0.286Vp-p (color burst), 75 Ohms
	Video Signal		1.0Vp-p, 75 Ohms
	Audio Input Signal		200m Vrms, 20k Ohms

**Computer Compatibility**

Resolution	Refresh Rate	Horizontal Frequency
640x400	85 Hz	37.9 kHz
	60 Hz	31.5 kHz
	72 Hz	37.9 kHz
	75 Hz	37.5 kHz
	85 Hz	43.3 kHz
800x600	56 Hz	35.1 kHz
	60 Hz	37.9 kHz
	72 Hz	48.1 kHz
	75 Hz	46.9 kHz
	85 Hz	53.7 kHz
1024x768	60 Hz	48.4 kHz
	70 Hz	56.5 kHz
	75 Hz	60.0 kHz
	85 Hz	68.7 kHz
1280x1024	60 Hz	64.0 kHz

**Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly set forth in a written agreement signed by an authorized officer of 3M.

**Warranty; Limited Remedy; Limited Liability.**

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

**800-328-1371****<http://www.3M.com/walldisplay>  
e-mail: [meetings@mmm.com](mailto:meetings@mmm.com)****3M Austin Center**

Building A145-5N-01  
6801 River Place Blvd.  
Austin, TX 78726-9000

**3M Canada**

P.O. Box 5757  
London, Ontario  
N6A 4T1

**3M Mexico, S.A. de C.V.**

Apartado Postal 14-139  
Mexico, D.F. 07000  
Mexico

**3M Europe**

Boulevard de l'Oise  
95006 Cerge Pontoise Cedex  
France

Litho in USA  
Copyright © 2005 3M  
All Rights Reserved  
78-6970-9429-6 Rev. A