

EXPERIENCE THE ASPEN TOUCH



.....

Aspen ATM-123R Series Touch Monitor Product Manual



Copyright © 2004, Aspen Touch Solutions, Inc. All Rights Reserved

No part of this document may be reproduced, photocopied, transmitted, translated to another language or stored on a computer or imaging or information retrieval system in any form, whether electronic, mechanical, optical or otherwise, without the prior written permission of Aspen Touch Solutions.

Disclaimer

The information contained in this document is subject to change without notice and should not be construed as a commitment or obligation by Aspen Touch Solutions. Aspen Touch Solutions assumes no responsibility for any errors that may appear in this document, and does not make any expressed or implied warranty with regard to this document, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. Aspen Touch Solutions shall not be liable for any incidental or consequential damages arising from or in connection with the use of this document or the product which it describes, whether or not that use is consistent with any statement in this document.

Trademarks

Aspen, Aspen Touch Monitor, ATM, Auto-Sensing Brightness Adjustment and the Aspen logo are trademarks of Aspen Touch Solutions, Inc. Trademarks of all other products mentioned in this document are owned by the products' respective companies.

Contact Information

Aspen Touch Solutions
31207 Keats Way, Suite 104
Evergreen, Colorado 80439
tel: 303.468.4130
toll free: 877.427.7393 (North America)
fax: 303.468.4131
web: www.aspentouchsolutions.com
email: techsupport@aspentouchsolutions.com

Aspen ATM-123R Series Touch Monitor

Product Manual

Table of Contents

Usage Notice	2
Introduction	2
Connections and Installation	3
Data Connection	
Power, Video and Audio	
Mounting	
Display Setup and On Screen Display (OSD)	4
On Screen Display Controls	
Display Setup	
Display Resolution	
OSD Menu and Functions	
Power/OSD Lock/Unlock	
Auto-Sensing Brightness Adjustment	
Touchscreen and Touchscreen Drivers	7
Touchscreen Features and Use	
Touchscreen and Peripheral Drivers	
Driver Installation	
Specifications	9
Glossary	11
Mounting Template	12
Warranty	13

Use the ENTER button to select a highlighted menu, and to move between individual items within a menu. Use the UP/DOWN buttons to select/deselect an item, or to increase/decrease the value of an item.

Contrast and Brightness

-  Contrast Controls the display contrast.
-  Brightness Controls the display brightness.

Video Adjustment

-  Auto Adjust Automatically sets display image size, position, and fine adjustment. Contrast and brightness are not adjusted.
-  Left/Right Controls horizontal position.
-  Up/Down Controls vertical position.
-  Horizontal Size Increases or decreases the horizontal size of the image.
-  Fine Controls the vertical fine adjustment. May improve picture detail in emulation modes.

OSD Tool

-  OSD Left/Right Adjusts the default horizontal position of the OSD on the display.
-  OSD Up/Down Adjusts the default vertical position of the OSD on the display.
-  OSD Timeout Determines time (in seconds) that OSD waits before automatically closing after no action has been performed.
-  Factory Reset Recalls original factory settings of image parameters.
-  OSD Language Selects the OSD menu language—English, French, German, Italian, Spanish, Japanese, Traditional Chinese, or Simplified Chinese.

-  **Color Adjustment** Adjusts preset *color temperature* of the image. Available choices are 9300, 7500, 6500, and 5500° *Kelvin (K)*. A User mode allows custom setup of each color component of the image—Red, Green and Blue. Default setup for this parameter is 6500°K. Do not adjust color temperature unless you have a specific need to do so.

Audio Adjustment

-  Volume Adjusts the loudspeaker volume.
-  Mute ON/OFF Mute ON turns off the audio function. Mute OFF restores the audio function.

Auto DIM

-  Auto Dim Turns the Auto-Sensing Brightness Adjustment circuit ON or OFF.
-  Dimming Range Menu shows sensed light level, and brightness setting as a percentage of full scale (same setting as Brightness in Contrast and Brightness menu when Auto DIM is OFF). With Auto DIM ON, brightness is now controlled by the light sensor located at top center of the front bezel. See additional discussion of the Auto-Sensing Brightness Adjustment feature further in this section.

Power/OSD Lock/Unlock **Note:** There is no menu graphic for this feature.

The Power/OSD lockout menu is separate from the main OSD.

1. Access this feature by first pressing the MENU button to access the main OSD.
2. While the main OSD is displayed, press and hold the MENU button. The main OSD will disappear.
3. While continuing to hold the MENU button down, momentarily press the POWER button. The POWER/OSD lockout menu will appear.
4. Press the ENTER button to alternately select OSD or POWER, and use the UP and DOWN buttons to toggle your selection between UNLOCK (the default) and LOCK.

OSD LOCK defeats all normal access to the OSD, including the Direct Access shortcuts to Brightness, Audio, and Video Auto Adjust. *To access the OSD when in OSD LOCK, press and hold MENU, and while holding MENU down, momentarily press POWER.*

POWER LOCK defeats the operation of the POWER button. This feature, in addition to preventing casual vandalism of the system, allows the Touch Monitor to power up properly when the system or Touch Monitor is powered from an outlet strip or remote master switch, or when the monitor is installed in a kiosk or other location where the power button is inaccessible.

OSD buttons: UP, DOWN and ENTER will scroll through available choices when held down continuously.

The Auto-Sensing Brightness Adjustment: This feature is intended to be used in situations where the ambient lighting can change significantly over time.

The brightness of the image tracks ambient brightness and dims the display as the ambient light decreases, making the image less obtrusive under reduced lighting conditions where high image brightness is not necessary for good viewability.

To use Auto-Sensing Brightness Adjustment:

1. Turn AutoDIM OFF with the Auto DIM OSD menu
2. Set Brightness to desired value in brightest expected ambient light
3. Turn AutoDIM ON.
4. Set the Dimming Range to desired value. (See discussion below).
5. Close AutoDIM menu

If the brightest ambient light is 150 or above as reported by the Auto DIM OSD menu (units are approximately in *Lux*, a common measure of *illuminance*, or lighting of surfaces by light sources), the brightness will not change when the Auto Dim feature is turned ON.

However, when the ambient lighting is less than 150, the display will immediately dim in response to the setting of the Auto Dim range and the ambient light:

- Dimming Range is a measure of how much the display will dim when ambient light is reduced
- Dimming only occurs in the ambient light range of 0-150 (Lux) as measured by the automatic light sensor. If the ambient light is brighter than 150, no dimming will occur until the light level drops below 150, and then will drop proportionally to the measured light level

- A Dimming Range setting of 100 means that the image brightness will be reduced to its minimum in total darkness conditions
- A Dimming Range setting of 0 means that the image brightness will not be reduced at all under total darkness conditions

Touchscreen and Touchscreen Drivers

Touchscreen Features and Use: Your Aspen ATM-123R series touch display is equipped with a *resistive* touchscreen. Features of a resistive touchscreen that are important for your use are:

- **Composition:** The touchscreen is made of a thin (about 1/8") sheet of glass overlaid with a layer of plastic. The resulting composite is placed in front of the LCD panel in your Aspen Touch Monitor.
- **Activation:** The touchscreen can be activated by anything that applies a force of about 1 ounce over a normal fingertip-sized area. Objects with smaller contact areas such as a credit card, pen, pencil tip or pencil eraser will activate the touchscreen with even less force. So, in normal circumstances, a very light touch is all that is required to navigate your application with the touchscreen.
- **Use and Abuse:** The touchscreen plastic layer has a hard front surface coating on it, and will withstand years of use with fingers, fingernails and other relatively large radius styli. However, hard objects with sharp edges can easily damage the touchscreen. Avoid the use of ball-point pen barrels with the tip retracted, microball pens, keys, rings, coins and metal tableware.
- **Cleaning:** The touchscreen may be cleaned with common glass cleaners, but do not use cleaners with abrasives—Comet, BonAmi, etc. The best procedure for cleaning the screen is to apply your cleaner to a soft cloth or paper towel, and wipe the touchscreen until contamination is removed. Applying cleaner to the cloth rather than spraying it directly on the screen will minimize the amount of overspray that may collect at the bottom of the screen.
- **Application Use:** One characteristic of the resistive touchscreen technology is that it averages multiple touches. So, If you touch the screen with two fingers at the same time, on opposite sides of the display, the reported location to the application will be in the middle of the screen! Consider this in navigation of your application.

Touchscreen and Peripheral Drivers: Drivers for different operating systems have been supplied on a CDROM that accompanied your Aspen Touch Monitor. If you cannot find the disk or need additional copies of the software, contact Aspen at <http://www.aspentouchsolutions.com>.

Touchscreen and Peripherals Driver Installation: Drivers for all supported operating systems are contained on the Aspen Touch Solutions Install Disk. To install drivers, follow the procedures below as appropriate.

Touchscreen Support: Support is provided for Windows 98/Me/NT/2000/XP, MS-DOS and Linux (kernels 4.2.18 and above).

The MSR and Customer Display: Both of which are USB devices and are currently supported under Windows platforms only. Support for Linux will be provided in the future. Contact Aspen TechSupport for further information.

Windows 98/Me/NT/2000/XP Installation:

- If you are using a USB data interface, disconnect it from the computer before proceeding. Connect the touchscreen cable if using a serial interface (ATM-123R only). Insert the disk in your drive. If AutoRun does not start the installation, double click the "Setup" program in the CDROM folder.
- Follow the instructions pertaining to your particular product configuration.

Specifications

Monitor Part Number	Standard OEM	ATM-123RM, ATM-123RMD ATM-123RO, ATM-123RMO
Display		12.1" Color AMTFT LCD
Color	Standard, OEM	Dark Gray
Touchscreen Technology		5-wire resistive
Active Screen Dimensions	Horizontal Vertical	9.66"/246mm 7.26"/184mm
Monitor Dimensions	Width Height with stand Height, no stand Depth with stand Depth no stand	12.4"/315mm 11.5"/292mm 10.5"/268mm 8.25"/210mm 2.50" / 64mm
Weight	ATM-123R/RM Actual Shipping ATM-123RMD/RMO/RMDO Actual Shipping	15 lb/6.8kg 21 lb/9.5kg 16 lb/7.3kg 22 lb/ 10kg
Brightness	LCD With touchscreen	350 nit (typical) 290 nit (typical)
Colors		262,144 (6-bit video)
Resolution	Native Supported	800 x 600 800 x 600 at 60,70, and 75 Hz 720 x 400 at 70 Hz 640 x 480 at 60 and 75 Hz
Viewing Angle	Horizontal Vertical	130° Total (65° left/right) 105° Total (40° up/60° down)
Contrast Ratio		300 to 1
Scanning Frequency	Horizontal Vertical	31.5 - 60 kHz 56 - 75 Hz
Video Input		Analog RGB (VGA) Analog RGB with sync on green
Video Bandwidth		80 MHz
Input Video Format		VGA/SVGA/XGA analog
Power Supply Voltages		External DC supply AC input 100-240VAC/50-60 Hz
Power Dissipation		30 W max
Temperature	Operating Storage	+5°C to 40°C - 30°C to 70°C

Humidity	Operating Storage	20% to 80% non-condensing 5% to 90% non-condensing
External Connections	Power Audio Video Touch Interface	Mini-jack compatible with 5.5 x 2.0mm plug Standard 3.5mm Stereo Jack HD15 (VGA) Standard USB series "B" receptacle (detachable USB cable)
Connectivity		Two USB "A" input ports (ATM-123RM/RMD/RMO/RMDO)
POS Options	Magstripe Reader Customer Display	3 Track Reader with Power and Error Indicator Light 2 x 20 VFD Display with Dual Axis (tilt & swivel) Movement
Additional features	<p>Power indicator for display, built in to power switch (OEM models only); Power switch state memory</p> <p>Digital on-screen display (OSD) Hidden, software lockable controls</p> <p>Direct access to brightness, audio mute, and video auto adjust functions (bypass OSD)</p> <p>Auto-Sensing Brightness Adjustment</p> <p>Rubber Wedge Sealed touchscreen</p> <p>Removable base</p> <p>Two 75mm VESA mounts (On base and display chassis)</p> <p>Top or bottom access to countertop mounting holes</p> <p>Kensington lock connection on chassis</p> <p>Broad range of vertical tilt (-5° to +90°)</p> <p>Two built-in 1W baffled speakers</p> <p>Two Port USB Hub (ATM-123RM/RMD/RMO and RMDO models only)</p> <p>Product Agency Approvals UL/cUL, TUV(GS), FCC Class B, CE</p> <p>Warranty 3 years, 24 hour advance replacement</p>	

Specification Notes

1. Pertaining to the CE mark:

The application of this monitor is restricted to special controlled luminous environments. The screen surface tends to reflect annoying light of lamps and sunlight. To avoid these reflections the monitor should not be positioned in front of a window or directed to luminaries. The monitor is in compliance with Reflection Class III according to ISO 9241-7.



Experience the Aspen Touch.
www.aspentouchsolutions.com



31207 Keats Way, Suite 104
Evergreen, Colorado 80439
tel: 303.468.4130 fax: 303.468.4131
toll free: 877.427.7393
web: www.aspentouchsolutions.com
email: info@aspentouchsolutions.com