



**ATLONA**  
**2x2 HDMI™ MATRIX SWITCH**  
**HDMI™ VERSION 1.3**  
**AT-HDMI-22M**

**USER MANUAL**



## TABLE OF CONTENTS

1. Introduction	1
2. Features	1
3. Package Contents	1
4. Operation Controls and Functions	2
4.1 Front Panel	2
4.2 Rear Panel	3
4.3 Remote Control	3
4.4 RS-232 Protocol	4
4.4.1 Pin Definition	4
4.4.2 Commands	4
5. Specifications	5
5.1 General Specification	5
5.2 Support Resolution	5
6. Connection and Installation	5
7. Safety	6
8. Warranty	7

## INTRODUCTION

AT-HDMI-22M is a high performance HDMI™ Matrix with remote control. It offers you maximum convenience in HDMI™ signal distribution when you have multiple HDMI™ sources and displays to connect together. Each of the two HDMI™ sources can be directed to any one of the two outputs, so two displays can show 2 identical or 2 different sources at the same time. AT-HDMI-22M provides a maximum of 4 possible connection scenarios between sources and displays.

When HDMI™ signal progresses through AT-HDMI-22M, it is re-timed, level compensated, phase error corrected, and data jitter eliminated, so the output is a regenerated brand new

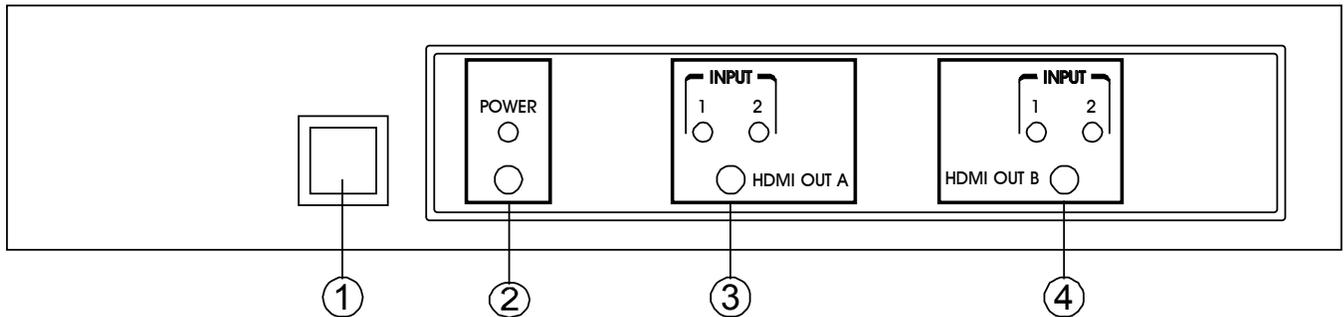
## FEATURES

1. HDMI 1.3, HDCP 1.1 and DVI 1.0 compliant.
2. HDMI input is compensated, clock / phase adjusted, and jitter eliminated so the output is a well tuned standard HDMI signal.
3. Input source LED indicators on each output select.
4. Ideal for home theater integration, conference room and retail stores.
5. Compatible with all HDMI sources and displays.
6. Supports high resolution input/output:  
PC: VGA, SVGA, XGA, SXGA and UXGA (1600X1200) &  
HDTV: 480i, 576i, 480p, 576p, 1080i, and 1080p
7. RS-232 control.
8. IR remote control.

## PACKAGE CONTENTS

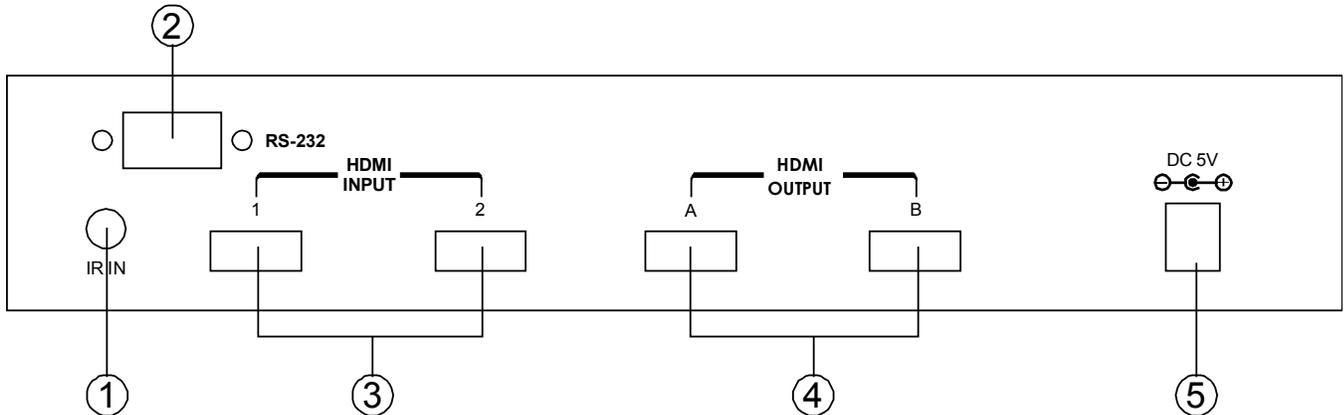
1. AT-HDMI-22M HDMI Matrix
2. 5VDC Power Supply Adaptor
3. Operation Manual

## 4.1. Front Panel



1. Remote control sensor.
2. Power Switch & LED Indicator:  
The LED will illuminate when the power is turned on.
3. Input Select/Indicators (A):  
Press the "HDMI OUT A" button repeatedly to switch to your desired source, and the LED will illuminate to indicate which input source is being selected, and routed to HDMI A display.
4. Input Select/Indicators (B):  
Press the "HDMI OUT B" button repeatedly to switch to your desired source, and the LED will illuminate to indicate which input source is being selected, and routed to HDMI B display.

## 4.2 Rear Panel



### 1. IR IN Socket:

Plug the IR extender sensor (optional) into the socket for IR extension control.

### 2. RS-232 Communication Port:

Connect to the COM port of your PC for the distant control over RS-232 channel.

### 3. HDMI inputs 1 and 2:

Connect to the HDMI output of your source equipment such as DVD player or set-top-box.

### 4. HDMI outputs A and B:

Connect each of these output ports to the HDMI input of an HDMI display.

### 5. Power:

Plug the 5VDC power supply into the unit and connect the adaptor to AC wall outlet.

## 4.3 Remote Control

### 1. Power:

Press the button to turn on/off the unit.

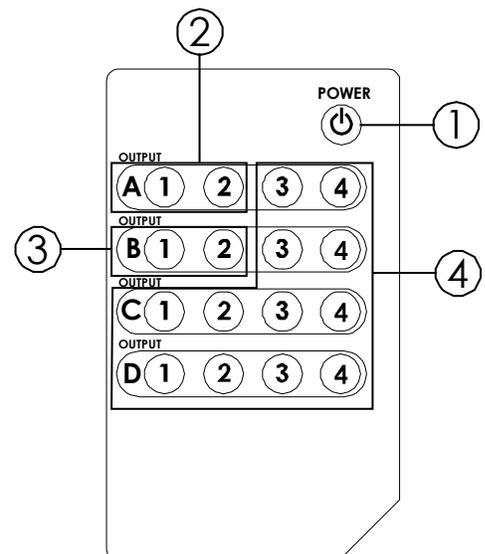
### 2. Input Select for HDMI OUT A:

Press 1 or 2 to select the desired input source for HDMI OUT A.

### 3. Input Select for HDMI OUT B:

Press 1 or 2 to select the desired input source for HDMI OUT B.

### 4. Void buttons (No function.)



## 4.4 RS-232 Protocol

### 4.4.1 Pin Definition

CHMX-22			Remote Control Console	
PIN	Definition		PIN	Definition
1	NC		1	NC
2	Tx	→	2	Rx
3	Rx		3	Tx
4	NC	←	4	NC
5	GND		5	GND
6	NC		6	NC
7	NC		7	NC
8	NC		8	NC
9	NC		9	NC

\*RS-232 transmission format:

Baud Rate: 9600 bps

Data bit: 8 Bits

Parity: None

Stop Bit: 1 bit

### 4.4.2 Commands

COMMAND	ACTION
P0	Power Off (standby)
P1	Power On *
ST	System Status *
VR	Firmware Version
A1	Output A select Input1
A2	Output A select Input2
B1	Output B select Input1
B2	Output B select Input2

## SPECIFICATIONS

### 5.1 General Specification

- \* Frequency bandwidth: 2.25Gbps (single link)
- \* HDMI™ v1.3
- \* Input/Output: 2-in to 2-out HDMI female ports
- \* 5V DC power supply
- \* Dimensions: 240 (W) x 165 (D) x 49 (H)mm
- \* Weight: 3.1Kgs

### 5.2 Support Resolution

INPUT	
PC	VGA, SVGA, XGA, SXGA, UXGA
TV	480i, 480p, 576i, 576p, 720p, 1080i, 1080p
OUTPUT	
PC	VGA, SVGA, XGA, SXGA, UXGA
TV	480i, 480p, 576i, 576p, 720p, 1080i, 1080p

## CONNECTION AND INSTALLATION



### Safeguards

To reduce the risk of electric shock, do not expose this product to rain or moisture.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

Do not modify the wall plug. Doing so will void the warranty and safety features.

This equipment should be installed near the socket outlet and the device should be easily accessible in case it requires disconnection.

### Precautions

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product or cause fires.

In the event of an electrostatic discharge, this device may automatically turn off. If this occurs, unplug the device, and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins, or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements and swimming pools.

Use only accessories recommended by ATLONA to avoid fire, shock or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluid or aerosols, which could enter the unit and cause damage, fire or electrical shock. Some substances may also mar the finish of the product.

Never open or remove unit panels or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-HDMI-22M. Opening the product will void the warranty.

Do not attempt to service the unit. Instead disconnect it and contact your Authorised ATLONA reseller or contact ATLONA directly.

**1. LIMITED WARRANTY**

Atlona Technologies warrants that (a) its products (the “Product”) will perform substantially in accordance with the accompanying written materials for a period of 3 YEARS from the date of receipt and (b) that the Product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to Customer.

**2. CUSTOMER REMEDIES**

Atlona Technologies and its suppliers’ entire liability and Customer’s exclusive remedy shall be, at Atlona Technologies’ option, either return of the price paid for the Product, or repair or replacement of the Product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of Customer’s receipt. This Limited Warranty is void if failure of the Product has resulted from accident, abuse, or misapplication. Any replacement Product will be warranted for the remainder of the original warranty period or 3 year, whichever is longer.

**3. NO OTHER WARRANTIES**

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, ATLONA TECHNOLOGIES AND ITS SUPPLIERS DISCLAIM ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE PRODUCT AND ANY RELATED WRITTEN MATERIALS. THIS LIMITED WARRANTY GIVES CUSTOMER SPECIFIC LEGAL RIGHTS. CUSTOMER MAY HAVE OTHER RIGHTS DEPENDING ON THE JURISDICTION.

**4. NO LIABILITY FOR DAMAGES**

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL ATLONA TECHNOLOGIES OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR INDIRECT DAMAGES FOR PERSONAL INJURY, LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THIS PRODUCT, EVEN IF ATLONA TECHNOLOGIES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, ATLONA TECHNOLOGIES’ AND ITS SUPPLIERS’ ENTIRE LIABILITY UNDER ANY PROVISION OF THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE PRODUCT. BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.



ATLONA  
2151 O’toole Ave, Ste D  
San Jose CA 95131  
Toll Free: 1-877-536-3976  
International: 408-954-8782  
FAX: 408-954-8792  
Website: [www.atlona.com](http://www.atlona.com)  
E-MAIL: [info@atlona.com](mailto:info@atlona.com)