

## **Table of Contents**

| Safety Instructions                  | 3∼4   |
|--------------------------------------|-------|
| Product Features                     | 5     |
| Package Contents                     | 6     |
| Connections and Installation         | 7     |
| Installing Monitor Driver            | 8~9   |
| MIMO Display Setting                 | 10~12 |
| Installing Touch Screen Controller   | 13~15 |
| System Requirements and Restrictions | 16    |
| Troubleshooting                      | 17~19 |
| Specifications                       | 20    |

## Safety Instructions

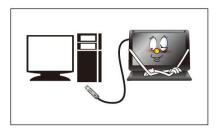
These safety instructions must be followed to ensure your safety and prevent property damage.



#### Warning/Cautions:

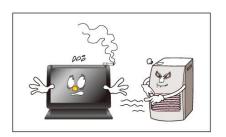
Otherwise, it may result in personal injury or property damage.

Make sure to read the instructions carefully and use the product in the correct manner.



#### Power Source:

- Make sure to use USB Cable (DC 5V) only.
- \* MIMO doesn't require any additional power source



- Do not place MIMO in a location exposed to moisture, dust, smoke, water, or in a car.
- \* Otherwise, this may result in electric shock or fire.



# Clean the product using a soft cloth with a monitor cleaner only.

- Make sure to disconnect USB Cable while cleaning
- Ensure that water does not enter the product and that it is not wet.

\* Otherwise, this may result in electric shock, fire or a malfunction.



- Do not force on LCD(Touch Panel) Screen
- Do not tap or scratch LCD(Touch Panel) Screen with a sharp object.
- \* Otherwise, LCD(Touch Panel) may get damage.



#### Product Input/Output Connectors

- Do not insert any metal, such as chopsticks, coins, pins and steel,

- If foreign material enters the product, disconnect the USB cable and contact a Service Center.



#### - Do not install MIMO in an unstable location

- Otherwise, it may fall and cause personal injury and/or damage the product.



- Ensure that users do not disassemble, repair or modify the product themselves
- If the product needs to be repaired, contact a Service Center.



If water enters the product, disconnect the USB and contact a Service Center. This may result in a product malfunction, electric shock, or fire.

## Product Features

- ▶ USB powered monitor with Touch Screen Panel (UM-720S, UM-720F)
- Super Slim Foldable and Portable Design
- With only USB cable connection, a user may utilize MIMO as Multiple Input/ Output device for Video Conference, Instant Messaging, News and Stock casting.
- Each model has different functions and features as listed Product Matrix below

#### Product Matrix

| Model Name         | UM-710S                    | UM-720S                    | UM-710F                    | UM-720F                    |
|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Extension Monitor  | ✓                          | <b>~</b>                   | ~                          | ✓                          |
| Pivot              | ✓                          | ✓                          | ~                          | ✓                          |
| Touch Screen       |                            | ✓                          |                            | ✓                          |
| VESA 75 Compatible |                            |                            | ✓                          | ✓                          |
| Color              | Black Color<br>White Color | Black Color<br>White Color | Black Color<br>White Color | Black Color<br>White Color |

\* Product Colors and Designs may vary upon each product and above listed specifications are subject to change without prior notice





\* Pivot Caution: MIMO screen rotates one way only

 Horizontal to Vertical: Clockwise
 Vertical to Horizontal: Counter-clockwise
 Do not force to rotate the screen opposite way

### Package Contents

Please make sure the following items are included with your monitor. Contact a local dealer to buy optional items.

▶ UM-710S/ UM-720S







UM-710S/ UM-720S

**USB CABLE** 

Install Disc + User Manual

▶ UM-720F



UM-710F/ UM-720F



**Bracket & Screws for VESA 75** 



**USB CABLE** 

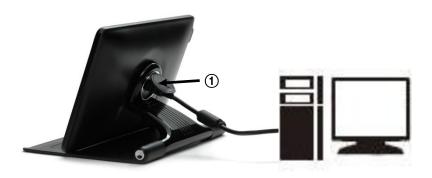


Install Disc + User Manual

**\*** Package Contents are subject to vary upon each model, please contact your local dealer if any items are missing.

## Connections and Installation

#### MIMO requires USB connection only.



① USB Cap: USB mini B type connector inside

#### Buttons



#### **System Requirements**

- CPU : Intel Pentium/Celeron/AMD/K6/Athlon/Duron 1.2GHz or above
- RAM : 512MB RAM or above
- USB : at least one or more USB2.0 port
- HDD: 30MB HDD space above
- O/S : Windows 2000 SP4/XP SP2 32bit/Vista 32bit

#### Using the Software

With only USB cable connection, a user may operate MIMO as an Extension monitor with Touch Screen Panel(UM-720S, UM-720F). For more detail functions and feature please refer to page 5 "Product Features")

#### Installing Monitor Driver

This section shows you how to install the DisplayLink USB Graphics software and Touchscreen driver for MIMO device on different operating systems.

Note: If you have v3.x, R4.1 or R4.2 DisplayLink software installed, you must uninstall it, using the Windows Add/Remove programs feature.

#### 1. Insert the CD into the CD-ROM drive

Important: Do not connect a MIMO device/screen to you PC before install.

Move to Setup.exe file in the directory of "1.DisplayLink Derivers" and double click on Setup.exe.

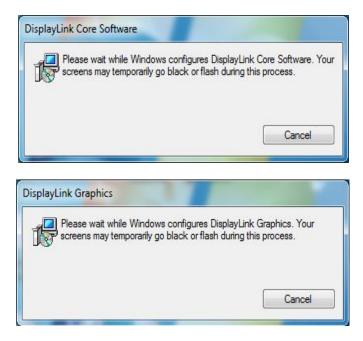
#### 2. Starting to install the USB Monitor Driver

The Windows User Account Control Window opens and click "I Accept" to install the DisplayLink Core software on the following message window.

| Install DisplayLink   | Software for DisplayLink  | Graphics   |                   |
|---|---|--|-------------------|
|   |   | DisplayL   | ink               |
| English   | •   | 5.2.1  | 22372.0           |
| SOF   | TWARE END USER L  | ICENCE AGREEMENT FOR   | ^                 |
| DISPLAYLINK   |   | DISPLAYLINK GRAPHICS ADAPTE<br>WARE  | R                 |
|   | (THE "PR  | OGRAM")  |                   |
| (UK) Limited ("D  | isplayLink"). BY INS  | , the end user, ( <b>"You"</b> ) and DisplayL<br>TALLING THIS SOFTWARE, YOU A<br>RMS OF THIS AGREEMENT.  |                   |
| software at least<br>disabled this fe<br>information abou<br>update servers d | once and then again a<br>ature when given thi<br>t your PC or the softw | nstalled, will check for updated syst<br>tr regular intervals unless you specific:<br>s option. No personal information<br>vare installed on your PC is sent to<br>cepting the End-User License Agreem<br>ure. | ally<br>or<br>our |
| Automatically che   | ck for updates  | I Accept Cancel  |                   |

#### 3. DisplayLink Core Software window opens

The program will show the progress of installing the DisplayLink Core software and DisplayLink Graphics.



Note: The screen may flash or go back during the install and no message will be shown at the end of the install.

#### 4. Installing device driver message

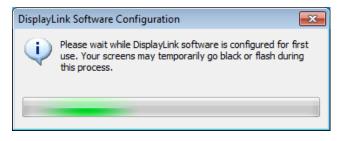
Connect your MIMO device via the USB cable to your PC

#### For Windows 8, Windows 7 and Vista

Windows detects the new hardware and automatically downloads the driver



A message will be shown that DisplayLink software is configuring itself for first use.



The screen should flash and the MIMO device should start to extend the Windows desktop.

Once the configuration is finished, the DisplayLink software installation will be completed without notification.

#### For windows XP,

this window installs the driver and the installation will be completed automatically and the below message (or similar) windows opens



#### 5. Rebooting your system

After complete the install of DisplayLink software, on some machines you may need to reboot before you can use your MIMO enabled device. If your MIMO device is UM-720S or UM-720F, you do not have to reboot your system before the install of touchscreen driver.

Note: Please find and install the DisplayLink software for Mac in the directory of "1. DisplayLink Drivers  $\rightarrow$  Mac".

#### MIMO Display Setting

#### [ In case of Windows 7 – Controlling the MIMO Display ]

#### 1. MIMO Display Properties Setting

| Change the ap                              | pearance of your displays   |                   |
|--|---|-------------------|
|  |   | Detect            |
| Display:                                   | 1. Mobile PC Display  |                   |
| Resolution:<br>Orientation:                | 1280 × 800 (recommended)   Landscape  |                   |
| Multiple displays:<br>This is currently yo | Extend these displays 🔹   | Advanced settings |
| Make text and othe                         | ctor (or press the 🚑 key and tap P)<br>r items larger or smaller<br>gs should I choose? |                   |

You can configure MIMO device through the use of Windows Display Properties (WDP), which provides a simple method to attach, rotate, duplicate or extend screens as well as modify screen resolution.

- 1. Open Windows Display Properties (WDP)
- 2. Set the display options, Refer to the table below for details on each option
- \*. How to open Windows Display Propertied (WDP)
- 1. Right-click on the desktop
- 2. Select Screen Resolution from menu

OR

- 1. Right Click on the MIMO icon on the taskbar
- 2. Click 'Advanced'

| Menu               | Sub-Menu               | Description   |  |  |
|--------------------|------------------------|---|--|--|
| Display            |                        | Use the drop down list to select a display to be configured       |  |  |
| Resolution         |                        | Use the drop down list and user the slider to choose a resolution |  |  |
|                    | Landscape              | Sets the display to landscape mode                                |  |  |
| Orientation        | Portrait               | Sets the display to portrait mode                                 |  |  |
| Onentation         | Landscape (flipped)    | Sets the display to upside down landscape mode                    |  |  |
| Portrait (flipped) |                        | Sets the display to upside down portrait mode                     |  |  |
| Duplicate displays |                        | Reproduces the main display on the second display                 |  |  |
| Extend displays    |                        | Extends the main display on the second display                    |  |  |
| Multiple dicplays  | Show Desktop only on 1 | The desktop appears on the display marked,                        |  |  |
| Multiple displays  |                        | The display marked 2 becomes blank                                |  |  |
|                    | Show Desktop only on 2 | The desktop appears on the display marked 2,                      |  |  |
|                    |                        | The display marked 1 becomes blank                                |  |  |

#### 2. Windows Key + P for options of duplicating and extending screen



To control the behavior of an attached MIMO display, it is also possible to use Windows Key + P to display a menu(and cycle through it) to switch mode, which provides a simple method to duplicate and extend screen.

- 1. Select the Windows + P
- 2. Click on of the options, the display updates to reflect your choice

# Customize...

To control the behavior of an attached MIMO display, it is also possible to use Windows Key + P to display a menu(and cycle through it) to switch mode, which provides a simple method to duplicate and extend the main display onto the secondary display.

1. Click the Show hidden icons arrow to show all available icons from the taskbar

2. Click the MIMO Manager icon, A menu appears with several options, as described in the following table.

| Menu               | Descriptions   |
|--------------------|--|
| Check for updates  | Connects to the Windows Update and checks for newer versions and downloads them,       |
|                    | if available   |
| Optimize for Video | Select this option for better movie playback performance, only select this option when |
|                    | playing back video content   |
|                    | Note: Text may appear less clear when enabled  |
| Advanced           | Opens the Windows Display Properties (WDP)   |

#### 3. Using MIMO Manager Menu

#### [ In case of Windows Vista and XP – Controlling the MIMO Display ]

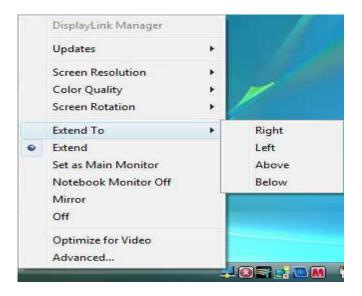
#### 1. MIMO setting icon.

When the MIMO driver installation is complete, the MIMO setting icon appears on your system tray.

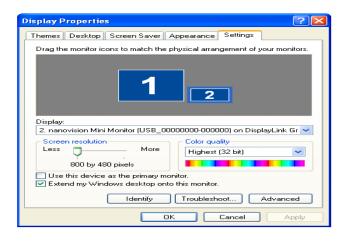


#### 2. Using MIMO Manager Menu

Click MIMO icon, then you may see the MIMO Manager menu on the taskbar, which provides a simple method to attach, rotate, duplicate or extend screens as well as modify screen resolution.



#### 3. MIMO Display Properties Setting



After finish installation of the MIMO driver, please follow below steps for multi-monitor setting. (Microsoft® Windows® XP Operating System)

- 1 Right-click on desktop then click "Display Properties", The Display Properties dialog opens.
- ② Select 'Setting' tab, then you may see connected monitors
- ③ Arrange the MIMO monitor's position with respect to the other monitors on the extended desktop in using the drag area.
- 4 Click 'OK' to save your change.

#### Installing Touch Screen Controller (For UM-720S, UM-720F)

As a matter of course it is highly recommended that any other non UPDD touch drivers be uninstalled prior to installing UPDD.

It is recommended that where possible the MIMO device is connected to the system

#### **1. Selecting Touch Screen Driver**

Select the Setup.exe file and click on Setup.exe in the directory of "Touch Drivers". Select "Microchip, AR1100, USB" and click "**Install**" when you see the following message window.

|  | UPDD Install   |          |
|--|--|----------|
| This program will install the<br>Universal Pointer Device Driver   | Software version: 04:01:08   |          |
| software on your computer,<br>USB controllers will be detected<br>automatically by the install<br>process and do not need to be<br>selected, Serial controllers need | Supported controllers<br>Microchip, TSHAHC-12/10, USB<br>Microchip, TSHARC-12/10, PS/2<br>Microchip, TSHARC-12/10, Serial<br>Microchip, AB1000, Serial | <u> </u> |
| to be selected now or after the<br>software has been installed,<br>Click "Install" to proceed,<br>or "Cancel" if you do not wish to                                  | Microchip, AH1100, USB   | <b>~</b> |
| install the software at this time,   | Install  |          |

#### 2. Installing the Controller

Program will display the progress as below.

| Installing |     |                   |
|------------|-----|-------------------|
|            |     |                   |
|            | 77% | Version 04.01.08R |

#### 3. Finish Touch Screen Controller installation

Click 「Close」 or <Enter> using keyboard.

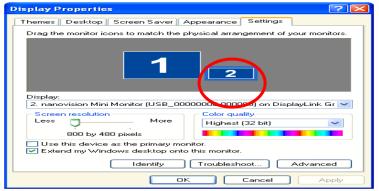
| UPDD Install  |
|---|
| Install successful  |
| The Universal Pointer Device Driver software has been<br>successfully installed on your computer, |
| If your touch device does not operate correctly then please reboot your computer,                 |
|   |

#### 4. Rebooting your system

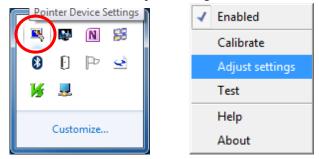
After complete the install, you need to reboot before you can use the MIMO enabled device.

#### 5. Settings and Calibrations

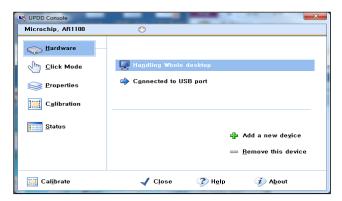
Check the monitor number of the installed MIMO at "Display Properties"



Right-click and click the "Adjust settings to run the UPDD Console on the system tray.



Chose Hardware and Click "Handling Whole desktop" menu



Select the monitor number of the installed MIMO.

| 💐 Desktop Area                                | ×                        |
|---|--------------------------|
| Microchip, AR1100                             |                          |
| Select a monitor or desktop area from the lis | t below                  |
| Monitor 2 ( <u>s</u> )                        | 星 Co <u>n</u> figure All |
| A calibration may be required if this setting | is changed               |
| <mark>√ 0</mark> K X Cance                    | el <u> H</u> elp         |

#### Calibration

The product is with factory default calibration value. If required user may execute Touch Screen Controller Calibration as follow.

Calibration is very important procedure to align coordinates of the exact touch point on screen with Windows cursor. With the calibration user may utilize Touch Screen Control without distortion.

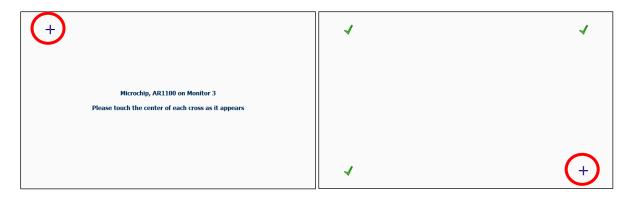
The last calibration data will be saved in the Windows system so as not to be required after reboot the system except the user rotate the screen.

1.1 Click 「Start」 -> 「Programs」 -> 「UPDD」 -> 「Setting」

1.2. Click UPDD Console (Pointer Device Setting) icon on system tray -> 「Calibration」

| UPDD Console           | ×   |
|------------------------|---|
| Microchip, AR1100      | 0   |
| <u>H</u> ardware     ■ | -   |
| Click Mode             | Randling Monitor 2 desktop                        |
| <u> </u>               | Connected to USB port                             |
| Calibration            |   |
| <u>S</u> tatus         | 👍 Add a new de <u>v</u> ice                       |
|                        | <u> </u>  |
| 🧮 Cal <u>i</u> brate   | 🖌 C <u>l</u> ose 🔇 H <u>e</u> lp 🧃 A <u>b</u> out |

Touch + mark position in order then Confirm



In case any mistake in calibration points inputs click 「Cancel」 or leave the screen untouched for about 10 seconds then the Calibration Data will be scrapped.

**\* Calibrated Touch Screen coordinates may vary upon the lapse of usage time. Periodical calibration is recommended.** 

## **System Requirements & Restrictions**

#### 1. Operating Systems

- Windows 8 (32-bit or 64-bit)
- Windows 7 (32-bit or-64-bit)
- Windows Vista with SP1 or 2 (32-bit or 64-bit editions)
- Windows XP Home or Professional with SP 2 or 3
- Windows Server 2008 and 2008 R2
- Mac OS X Snow Leopard 10.6 (Snow Leopard), 10.7 (Lion) and 10.8 (Mountain Lion): Supported

Note: 64-bit editions of XP and Windows server 2003 are not supported User may check the Operating System version by Right-click 'My Computer'  $\rightarrow$  'Properties'  $\rightarrow$  'System Properties'

# 2. MIMO is a USB monitor to be recognized as a Generic USB device. Therefore system boot-up screen or DOS screen cannot be displayed properly.

3. Any software that requires Hardware 3D accelerator cannot be displayed properly with USB monitor. Such as below,

- Real Player (Expansion Mode)
- 3D Graphic Games
- Programs based on Direct X graphic engine

#### 4. If the PC doesn't support USB2.0 MIMO may not operate properly.

5. If the systems' Graphic card doesn't support WDDM(Windows Display Driver Model), the USM monitor's extension mode may not work properly with Windows Vista System.

i.e.) Matrox Graphic Card specific version

## Troubleshooting

Before calling for assistance, please read carefully below. If you do need assistance, please call local service center or contact your dealer.

#### Q: No image on screen, I cannot turn on the MIMO.

A: Is USB cable connected and did you install MIMO driver yet?

Please run 'MIMO Installation Software' in the CD.

For more detail about driver installation, please refer to Connections & Installation chapter

#### Q: I cannot turn my MIMO screen on.

**A:** Please check if the USB cable is connected.

Touch the MIMO's power button ( $(\mathbf{I})$ ) once then check the screen status.

Please check if 'MIMO Installation Software' has been installed properly.

- 1. Right-click 'My Computer' -> click 'Properties' .
- 2. Click 'Device Manager' at 'Hardware' tab.
- 3. Locate the cursor on PC at the top of the system tree.
- 4. Click 'Action(<u>A</u>)' -> "Add Hardware(<u>A</u>)".
- 5. Reboot the PC.

\* Normal PC recognizes MIMO as a generic USB device. Frequent power on and off of the device may cause USB device error. Please refer to Microsoft customer support for USB devices' trouble shooting.

#### Q: MIMO screen doesn't move - stands still.

A: Please check MIMO screen's 'Hardware Acceleration' setting in desktop properties.

Adjust 'Hardware Acceleration' value as 'Max'.

- 1. Right-click on Desktop to and open 'Display Properties'.
- 2. Click 'Setting' -> Choose 'MIMO Mini Monitor'.
- 3. Click 'Advance(V)'.
- 4. Please check 'Hardware Acceleration' value as 'Max'.

#### Q: I cannot boot my system after connecting MIMO.

**A:** in case i815 chipset One-Board Type PC system, please disable 'Legacy USB support' option in system BIOS menu and reboot the system.

- BIOS setup method may differ from PC to PC, please refer to the User manual of the PC. Please refer to Microsoft homepage for more detail.

#### Q: I cannot see DOS opening screen with MIMO when my PC is booting up.

**A:** MIMO is a generic USB device. Since DOS doesn't recognize USB Device while booting-up, MIMO cannot get video signal from the system..

#### Q: I cannot run 3D graphic game with MIMO screen.

**A:** MIMO is using USB2.0 interface (480Mbps) for video data transfer. Therefore any program that requires 3D high speed graphic acceleration cannot be displayed properly.

- Restricted Programs,
  - (1) Real Player (Doesn't support Extension Mode)
  - (2) 3D Graphic Games
  - (3) Programs that requires Direct X graphic acceleration
  - (4) Power DVD
  - (5) Win DVD (Version 5 or later)
- Supported Multimedia Players
  - (1) Windows Media Player (Version 10 or later)
  - (2) GOM Player
  - (3) KM Player

#### Q: How to uninstall "MIMO installation software"?

A: 'Control Panel' -> 'Program Add/Remove' -> MIMO Mini Monitor' -> Click 'Remove'.

#### Q: How many MIMO can be connected to one PC?

**A:** MIMO is a generic USB device. Theoretically a PC can recognize up to 127 USB devices.

However with the latest PC systems, we recommend number of USB monitors and each respective PC system requirements as below.

- 1. 1~2 MIMO connections 1.2GHz CPU / 512 MB Memory
- 2. 3~5 MIMO connections 1.8GHz CPU / 1GB Memory
- 3. 6 MIMO connections 1.6GHz Dual core CPU / 1GB Memory

# \* Display response rates on each USB monitor may vary upon the PC's resource management status.

# Q: MIMO information remains in my 'Display Properties' even after disconnect or power off the MIMO.

**A:** The deactivated USB information implies power off or disconnected USB monitor status. To delete the deactivated monitor information, please uninstall 'MIMO Mini Monitor' driver. Once the driver is uninstalled, you may not use **MIMO. To use MIMO again please re-install the driver.** 

#### Q: How can I clean the outer case/LCD Panel?

**A:** Disconnect the USB cable and then clean the MIMO with a soft cloth, using either a cleaning solution or plain water.

Do not leave any detergent or scratches on the case. Do not let any water enter the monitor.

#### Q: I lost MIMO installation disc. Where can I get an additional installation disc?

A: the installation software can be downloaded at MIMO homepage (www.mimomonitos.com)

## Specifications

- Model Name: UM-710S, UM-720S, UM-710F and UM-720F
- Display Size: Diagonal 17.78 cm

152.4 mm(H) x 91.44 mm(V),

- Display Resolution: WVGA(800 x3(RGB)x 480)
- Pixel Pitch: 0.1905mm(H) x 0.1905mm(V)
- Number of Color: 16.7M
- Contrast: 400:1
- Input Power: USB Power (DC 5V)
- Power Consumption: Max. 4W
- Dimension/Weight

| Model        | Name     | UM-710S UM-720S UM-710F UM-7 |  | UM-720F |       |
|--------------|----------|------------------------------|--|---------|-------|
| Dimension    |          | 180(W) x 140(L) x 35(D)      |  |         |       |
| Dimension    | standing | 180(W) x 140(L) x 115(H)     |  |         |       |
|              | VESA 75  | 180(W) x 140(L) x 35(D)      |  |         |       |
| Weight (Main | Unit)    | 0.45kg 0.5kg 0.45kg 0.5kg    |  |         | 0.5kg |

Specifications are subject to change without prior notice.