Thank you for purchasing our AMW-1321AX-E01 Mobile Operator Terminal Station. We are confident that you will be pleased with the performance and reliability.

This manual is a user manual for AMW-1321AX-E01. It includes detailed description about how to install and operate the product. Arista Corporation recommends users to read through the entire manual and follow instructions to avoid any kind of obscurity in using the product. All the information contained in this manual is exclusive property of Arista. No reproductions of any kind even partial, of this manual is allowed without prior permission from the manufacture.
Product Safety Precautions

Read all of these instructions and save this user guide for later use. Follow all warnings and instructions on the product.

• Relative humidity: 25%~80%

• Storage temperature: -20°C to 60°C (-4°F to 140°F)

• Operation temperature: 0~50°C (32°F to 122°F)

• Unplug the unit when not in use for an extended period of time.

• Do not attempt to repair this product yourself. Always get a qualified service technician to carry out adjustments or repairs.

• Do not place heavy objects on the unit.

• Use only the power cord supplied with the unit. In the event that another power cord is used, one that is different than the one provided by the supplier, make sure that it is certified by the local and applicable national standards.

• If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.

• The power supply cord is used as the main disconnect device. Ensure that the socket outlet is easily accessible after installation.

• Overloaded AC outlets, extension cords, frayed power cords, and broken plugs are extremely dangerous. They may, and can, result in an electrical shock or fire hazard. Call an authorized service technician for any replacements.

• Hands must be dry when plugging the power cord into an AC outlet to prevent electrical shock. Do not damage the power cord by disassembling, bending, pulling or exposing it to heat as it may cause a fire or electrical shock.

• Make sure to completely insert the power plug into an AC outlet. Insecure connections can cause a fire.

• Ensure that the power source is grounded correctly.

• Unplug the AMW-1321AX-E01 Mobile Operator Terminal Station if cleaning is needed. The unit may be wiped with a dry or slightly damp cloth when the power is off.
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Features

AMW-1321AX-E01 Mobile Operator Terminal Station are completely sealed and water-resistant. AMW-1321AX-E01 operates at 110/220VAC input, it packs Intel 1.9GHz E3845 Quad Core Atom CPU and up to 8GB memory into compact, slim and fully sealed stainless steel enclosure. The water-proof connectors provides access for dual Gigabit Ethernet ports and one USB port. The Projected Capacitive touch screen can be operated with or without gloves which has to be able function with Projected Capacitive Touch. Equipped with four casters, AMW-1321AX-E01 realize a mobile workstation.

- 21.5" industrial waterproof display, 1920 x 1080 resolution
- Stainless Steel Enclosure
- Projected Capacitive Touch Screen
- Intel 1.9GHz E3845 Quad Core Atom CPU
- 8GB DDR3 SO-DIMM Memory
- Supports 2.5" HDD, 2.5" SSD, CFast Card
- Dual Gigabit LAN
- WiFi Connectivity
- Supports 3G/4G SIM card wireless network

Applications

AMW-1321AX-E01 mobile operator terminal station are widely used in manufacture enterprise. It is mainly used for industrial control, testing and other aspects.
## Specification

<table>
<thead>
<tr>
<th>LCD Display</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Size</td>
<td>21.5 inch</td>
</tr>
<tr>
<td>Resolution</td>
<td>1920 x 1080 Full HD</td>
</tr>
<tr>
<td>Backlight Lifetime</td>
<td>50,000</td>
</tr>
<tr>
<td>Colors</td>
<td>16.7 Million</td>
</tr>
<tr>
<td>Aspect ratio</td>
<td>16:9</td>
</tr>
<tr>
<td>Viewing angle(V/H)</td>
<td>178°/178°</td>
</tr>
<tr>
<td>Response time (Typical)</td>
<td>14 ms</td>
</tr>
<tr>
<td>Pixel Pitch (mm)</td>
<td>0.248 x 0.248</td>
</tr>
<tr>
<td>Contrast ratio</td>
<td>1000:1</td>
</tr>
<tr>
<td>Brightness</td>
<td>250 nits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Touchscreen</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Projected Capacitive</td>
</tr>
<tr>
<td>Touch Rating</td>
<td>50 Million Touches</td>
</tr>
<tr>
<td>Interface</td>
<td>USB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>System</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Intel E3845 1.91GHz Quad Core ATOM CPU</td>
</tr>
<tr>
<td>Chipset</td>
<td>Bay Trail</td>
</tr>
<tr>
<td>Memory</td>
<td>Up to 8GB DDR3 SO-DIMM</td>
</tr>
<tr>
<td>Video Controller</td>
<td>Intel Gen7 Intel Graphics DX 11, OGL3.2</td>
</tr>
<tr>
<td>Storage Option</td>
<td>2.5” HDD, 2.5” SSD, CFast Card</td>
</tr>
<tr>
<td>Keyboard / Mouse</td>
<td>USB</td>
</tr>
<tr>
<td>Watchdog timer</td>
<td>Programmable 1 - 255 sec</td>
</tr>
<tr>
<td>Remote Boot</td>
<td>ACP, PXE</td>
</tr>
<tr>
<td>BIOS</td>
<td>“American Megatrends Inc.” BIOS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I/O Communication</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USB Port</td>
<td>2 x USB 2.0</td>
</tr>
<tr>
<td>LAN</td>
<td>1 x Gigabit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OS Support</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OS Support</td>
<td>Windows 7 &amp; up</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation temperature</td>
<td>0<del>50°C [32</del>122°F]</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-20<del>60°C [-4</del>140°F]</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>5~95% RH [no condensation]</td>
</tr>
<tr>
<td>IP/MENA Rating</td>
<td>Meets NEMA 4X IP65</td>
</tr>
</tbody>
</table>
3 Main Parts

The diagrams below show the main parts of AMW-1321AX-E01. AMW-1321AX-E01 has ten parts: waterproof industrial panel computer, wifi box, slider bracket, keyboard and keyboard support, mouse support, battery indicator, power switch, the battery case, charging socket with waterproof cover, base with casters.
### 3.1 Main Parts List

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Waterproof industrial panel computer</td>
<td>IPC.</td>
</tr>
<tr>
<td>2</td>
<td>Wifi box</td>
<td>A device to provide network. If you need to reset wifi, you must open the back cover of this box using screwdriver and use the 5/64&quot; Allen Key to insert the hole at the left side of inside box.</td>
</tr>
<tr>
<td>3</td>
<td>Slider bracket</td>
<td>A adjustable tool.</td>
</tr>
<tr>
<td>4</td>
<td>Keyboard and keyboard support</td>
<td>A keyboard with a touchpad. The plate to hold the keyboard</td>
</tr>
<tr>
<td>5</td>
<td>Mouse support</td>
<td>The plates to hold the mouse.</td>
</tr>
<tr>
<td>6</td>
<td>Battery indicator</td>
<td>A indicator for battery and the accumulative using hours</td>
</tr>
<tr>
<td>7</td>
<td>Power switch</td>
<td>A button to control power on or off.</td>
</tr>
<tr>
<td>8</td>
<td>The battery case</td>
<td>A cabinet for the battery.</td>
</tr>
<tr>
<td>9</td>
<td>Charging socket (with waterproof cover)</td>
<td>For battery charging.</td>
</tr>
<tr>
<td>10</td>
<td>Base with casters</td>
<td>The holder for the whole machine.</td>
</tr>
</tbody>
</table>
3.2 Adjustment Viewing Angle

There has 30 degrees range to adjust the angle of view. You can adjust the two sides of the industrial panel computer to obtain the best visual effect as below.
3.3 Reset Wifi

There are some cases that need to reset wifi such as changing settings of wireless network. When you want to reset wifi, you need to do the steps below:

**Step 1.** Loose all screws of back-cover with screwdriver, and then take the cover away.

**Step 2.** Use the 5/64” Allen Key to click the hole at the left side of inside box.

![The hole diagram]
3.4 Keyboard

AMW-1321AX-E01 equip with keyboard. There has a touch pad on the keyboard. This touch pad take the place of mouse if no mouse is present.
3.5 The Height of Keyboard Support

Depending upon the operator's requirement, it may be necessary to adjust the height of the keyboard. As the rotary knob is moved, the keyboard support will be moved together. You can do the following steps to adjust the height:

Step 1. Loose the rotary knob. Meanwhile use the other hand to hold the keyboard support.
Step 2. Then pull the knob.
Step 3. Raise or fall the keyboard and mouse support at the desired height and put the hand at knob away.
Step 4. After the knob butt jump into the hole automatically, tighten the knob.
Pull the knob backwards

Loose knob
Tighten the knob.
3.6 Retractable Mouse Pads

Equipped with retractable mouse pad, AMW-1321AX-E01 can save space fully. When user's operation space is small, you can choose to fold the mouse pads. There has a touch pad on the keyboard. This touch pad take the place of mouse if no mouse is present.

3.6.1 Fold the mouse pads

Step 1. Loose screw 1 with suited screwdriver.
Step 2. Loose screw 2 with suited screwdriver
Step 2. Then pull mouse pad down.
Step 3. Tighten screw 3.
Pull down

Tighten screw3
3.6.2 Unfold the mouse pads

Step 1. Loose screw 3.
Step 2. Then pull mouse pad upwards to the horizontal position
Step 3. Tighten screw1 with suited screwdriver
Step 4. Tighten screw2 with suited screwdriver
Tighten screw1

Tighten screw2

Talk to us. We listen.
3.7 Battery Case

Powered by smart battery, we equip with charging socket to put a new supply of electricity into battery at anytime and any where and there is a battery indicator on the top of the battery case for AMW-1321AX-E01. You can read three values from this indicator which respectively are voltage, battery percentage and the accumulative using hours.

**Note:** Please close the waterproof seal cover after charging.
3.8 Mobile Base

There are four casters for the base. Equipped with 4 casters, AMW-1321AX-E01 can be moved at anytime and anywhere. You must press the button at the front casters to lock. Then the AMW-1321AX-E01 will be fixed at this place. When you want to take the AMW-1321-AX-E01 away, you need to unlock this two casters.
The diagrams below show the physical and specific dimensions of AMW-1321AX-E01.
The diagrams below show the detail description about ports.
This section describes the detail connections. There are four connection ports at the bottom of computer as below and the connections are showed at the next page.
This chapter provides information on driver installation for AMW-1321AX-E01 Mobile Operator Terminal Station. All driver softwares for AMW-1321AX-E01 can be downloaded from https://www.goarista.com/products/operator_stations/mobile_operator_terminal_stations.php (Click on product model name, then click Download and select the desired driver software.). Subsequent to this process, the install menu appears automatically.

7.1 Chipset Device Driver Installation
This section describes the Intel chipset device driver installation procedures.

a. Click the icon for Intel chipset device software pre-downloaded from Arista Corporation Website to initiate the installation process.

b. Click Next to Continue.
c. Read the license agreement and click **Yes** to continue.

d. Click **Next**. This displays the readme file with regards to the system requirements and installation information.
Talk to us. We listen.

**e. Click Next to continue.**

![Intel® Chipset Device Software]

Please wait while the following setup operations are performed:

- Installing Driver: Intel(R) ICH8 Family USB Universal Host Controller - 2634
  - Version: 8.0.0.1006
- Installing Driver: Intel(R) ICH8 Family USB Universal Host Controller - 2635
  - Version: 8.0.0.1008
- Installing Driver: Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836
  - Version: 8.0.0.1009
- Installing Driver: Intel(R) ICH8 Family USB2 Enhanced Host Controller - 283A
  - Version: 8.0.0.1008

Click Next to continue.

![Intel® Chipset Device Software]

**f. Click Finish to complete the setup.**

You must restart this computer for the changes to take effect. Would you like to restart the computer now?

- Yes, I want to restart this computer now.
- No, I will restart this computer later.

Click Finish, then remove any installation media from the drives.
7.2 Display Driver Installation
This section describes the Intel graphic media accelerator driver (Display driver software) installation procedures. Follow these steps:

a. Click the icon for Intel Graphic Media Accelerator Driver software pre-downloaded from Arista Corporation Website to initiate the installation process.
b. Click Next. The Intel® Chipset Graphics Driver Software – InstallShield Wizard dialog box appears.
c. Click Next. This displays the setup program information.

Welcome to the Setup Program

This setup program will install the Intel® Graphics Media Accelerator Driver onto this computer. It is strongly recommended that you exit all programs before continuing. Click Next to continue.

d. Click Next, read the license agreement and click Yes to continue.

License Agreement

You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?

INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)

IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the “Software”) until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.

Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
e. Click Next. This displays the readme file details, such as system requirements and installation information.

```
***************XP***************
* *
* Production Version Releases *
* *
* Microsoft Windows® XP *
* *
* Driver Revision: PV 14.36.5.5016 *
* Package: 60032 *
```

f. Click Next to continue.
g. Click Finish to complete the setup.

You must restart this computer for the changes to take effect. Would you like to restart the computer now?

- Yes, I want to restart this computer now.
- No, I will restart this computer later.

Click Finish, then remove any installation media from the drives.
7.3 LAN Driver Installation
This section describes the LAN driver installation procedures.

Follow these steps:
a. Click the icon for LAN driver software pre-downloaded from Arista Corporation Website to initiate the installation process.
b. Click Next to continue.
c. Click **Install** to proceed with the installation.

![Install process](image1)

**REAL TEK GbE & FE Ethernet PCIE NIC Driver - InstallShield Wizard**

Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.

![Install progress](image2)

**InstallShield Wizard Complete**

The InstallShield Wizard has successfully installed REAL TEK GbE & FE Ethernet PCIE NIC Driver. Click Finish to exit the wizard.

![Install completion](image3)

d. Click **Finish** to complete the setup.
7.4 Audio Driver Installation

This section describes the audio driver installation procedures. Follow these steps:

a. Click the icon for Audio driver software pre-downloaded from Arista Corporation Website to initiate the installation process.
b. Click Next, the InstallShield Wizard installs Realtek High Definition Audio Driver on your PC.
c. Click **Finish** to complete the setup.

![InstallShield Wizard Complete](image)

The InstallShield Wizard has successfully installed Realtek High Definition Audio Driver. Before you can use the program, you must restart your computer.

- Yes, I want to restart my computer now.
- No, I will restart my computer later.

Remove any dials from these drives, and then click **Finish** to complete setup.
The computer uses latest “American Megatrends Inc.” BIOS with support for Windows Plug and Play. The CMOS chip on the motherboard contains the ROM setup instructions for configuring the built-in motherboard BIOS.

The BIOS (Basic Input and Output System) Setup Utility displays the system’s configuration status and provides options to set system parameters. The parameters are stored in battery-backed-up CMOS RAM that saves this information when the power is turned off. When the system is turned back on, the system is configured with values you stored in CMOS.

The BIOS Setup Utility enables you to configure:

- Hard drives, diskette drives and peripherals
- Video display type and display options
- Password protection from unauthorized use
- Power Management features

The settings made in the Setup Utility affect how the computer performs. Before using the Setup Utility, ensure that you understand Setup Utility options.

The Standard configuration

A standard configuration has already been set in the Setup Utility. However, we recommend that you read this chapter in case you need to make any changes in the future.

This Setup Utility should be used:

- when changing the system configuration
- when a configuration error is detected and you are prompted to make changes to the Setup Utility
- when trying to resolve IRQ conflicts
- when making changes to the Power Management configuration
- when changing the password or making other changes to the Security Setup
8.1 Entering The Setup

When you power on the system, BIOS enters the Power-On Self Test (POST) routines. POST is a series of built-in diagnostics performed by the BIOS. After POST routines are completed, following message appears:

Press the **Delete key** to access BIOS Setup Utility.

Resetting the default CMOS values

When powering on for the first time, the POST screen may show a “CMOS Settings Wrong” message. This standard message will appear following a clear CMOS data at factory by the manufacturer. You simply need to Load Default Settings to reset the default CMOS values.

Note: Changes to system hardware such as different CPU, memories, etc. may also trigger this message.

Using BIOS

When you start the Setup Utility, main menu appears. The main menu of the Setup Utility displays a list of options that are available. A highlight indicates which option is currently selected. Use the cursor arrow keys to move the highlight to other options. When an option is highlighted, execute the option by pressing <Enter>.

Some options lead to pop-up dialog boxes that prompt you to verify that you wish to execute that option. Other options lead to dialog boxes that prompt you for information.

Some options (marked with a triangle ▶) lead to submenus that enable you to change values for the option. Use the cursor arrow keys to scroll through the items in the submenu.

In this manual, default values are enclosed in parenthesis. Submenu items are denoted by a triangle ▶.
The default BIOS setting for this built-in motherboard apply for most conditions with optimum performance. We do not suggest users change default values in the BIOS setup and take no responsibility to any damage caused by changing BIOS settings.

**BIOS navigation keys**

The BIOS navigation keys are listed below:

<table>
<thead>
<tr>
<th>KEY</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESC</td>
<td>Exits the current menu</td>
</tr>
<tr>
<td>→ ← ↑ ↓</td>
<td>Scrolls through items on a menu</td>
</tr>
<tr>
<td>+/-</td>
<td>Modifies selected field’s values</td>
</tr>
<tr>
<td>Enter</td>
<td>Select</td>
</tr>
<tr>
<td>F1</td>
<td>General Help</td>
</tr>
<tr>
<td>F2</td>
<td>Previous Value</td>
</tr>
<tr>
<td>F3</td>
<td>Optimized Defaults</td>
</tr>
<tr>
<td>F4</td>
<td>Save &amp; Exit</td>
</tr>
</tbody>
</table>

For the purpose of better product maintenance, the manufacture reserves the right to change the BIOS items presented in this manual. The BIOS setup screens shown in this chapter are for reference only and may slightly differ from what you see on your screen. Please visit the website to download the latest product and BIOS information.
8.2 Main Menu

When you enter the BIOS SETUP UTILITY, the Main menu will appear and display the system overview. You can set the system clock in this main menu.

<table>
<thead>
<tr>
<th>BIOS Information</th>
<th>EC Information</th>
<th>LAN1/LAN2 MAC Address</th>
<th>System Language</th>
<th>System Date</th>
<th>System Time</th>
<th>Access Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS Version</td>
<td>EC Version</td>
<td>MAC Address</td>
<td>Language</td>
<td>Date</td>
<td>Time</td>
<td>Administrator</td>
</tr>
<tr>
<td>Build date and time</td>
<td></td>
<td></td>
<td></td>
<td>Fri 03/11/2016</td>
<td>14:05:04</td>
<td></td>
</tr>
</tbody>
</table>

**BIOS Information**
This item shows the current BIOS information, including BIOS Version, Build date and time.

**EC Information**
This item shows the current EC information, including EC Version.

**LAN1/LAN2 MAC Address**
Use this item to view the LAN1/LAN2 Mac address.

**System Language**
This item allows you to choose the system default language.

**System Date**
Use this item to specify the system date. Manually enter the day, month and year.

**System Time**
Use this item to specify the system time. Manually enter the hours, minutes and seconds.

Press <Esc> to return to the Main Menu screen.
8.3 Advanced Menu

**Important:** Be cautious when changing the setting of advance menu items. Incorrect field values can cause the system to malfunction.

ACPI Settings
Scroll to this item and press <Enter> to view the following screen:

**ACPI Sleep State [S3 (Suspend to RAM)]**
Select the highest ACPI sleep state, the system will resume when the SUSPEND button is pressed.

**UPS Function (OFF)**
Power on or off the Uninterruptible Power Supply (UPS) system.
FB1216 Super IO Configuration

Scroll to this item and press <Enter> to view the following screen:

### Serial Port1/Port2/Port3/Port4 Configuration

- **Serial Port 1 Configuration**
  - **Device Settings**
  - **Change Settings**
  - **Type Select**

- **Enable or Disable Serial Port (COM)**

---

**FB1216 Super IO Chip**
- Serial Port 1 Configuration
- Serial Port 2 Configuration
- Serial Port 3 Configuration
- Serial Port 4 Configuration

Set Parameters of Serial Port 1 (COM)

**Notes:**
- **F1:** General Help
- **F2:** Previous Values
- **F3:** Optimized Defaults
- **F4:** Save & Exit
- **ESC:** Exit

---

**Version:** 2.17.1249. Copyright (C) 2016 American Megatrends, Inc.
Serial port1/port2/port3/port4(Enabled)
Use this option to enable or disable the use of serial ports.

Change settings(Auto)
Select an optimal settings for Super IO device.

Type select(RS232)
Select serial port type(RS232,RS422,RS485).

**S5 RTC Wake Settings**

Scroll to this item and press <Enter> to view the following screen:

![S5 RTC Wake Settings](image)

**Wake system from S5(Disabled)**
Use this item to enable or disable system wake on alarm event. Select Fixed Time. system will wake on the hr::min::sec specified. Select Dynamic Time, system will wake on the current time + Increase minute(s).
CPU Configuration

Scroll to this item and press <Enter> to view the following screen:

<table>
<thead>
<tr>
<th>Advanced</th>
<th>Socket specific CPU Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Configuration</td>
<td></td>
</tr>
<tr>
<td>Socket 0 CPU Information</td>
<td></td>
</tr>
<tr>
<td>CPU Speed</td>
<td>1918 MHz</td>
</tr>
<tr>
<td>64-bit</td>
<td>Supported</td>
</tr>
<tr>
<td>Intel Virtualization Technology</td>
<td>[Enabled]</td>
</tr>
</tbody>
</table>

**Socket 0 CPU information**

Use this item to view Socket 0 CPU information.

**Intel Virtualization Technology [Enabled]**

Most of the time, hardware virtualization technology extensions should be enabled in motherboard BIOS in order to run recent OS and applications. When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

Press <Esc> to return to the Advanced Menu screen.
**Miscellaneous Configuration**

Scroll to this item and press <Enter> to view the following screen:

![Screenshot of the Advanced Setup Utility interface with OS selection set to Windows 7]

### OS selection (Windows 7)

Use this option to select the operating system for the computer.

Press <Esc> to return to the Advanced Menu screen.
**USB Configuration**

Scroll to this item and press <Enter> to view the following screen:

![USB Configuration Screen](image)

**Legacy USB Support (Enabled)**

Use this option to enable USB mouse and USB keyboard support.

ENABLED option enables legacy USB support.

AUTO option disable legacy support if no USB devices are connected. DISABLED option will keep USB devices available only for EFI applications.

Press <Esc> to return to the Advanced Menu screen.
8.4 Chipset Menu

The chipset menu is for the Host Bridge chipset, South Bridge chipset and other system. Since features in this section are related to the chipset on the CPU board and are completely optimized, you are not recommended to change default settings in this setup table unless well oriented with chipset features.

North Bridge

Scroll to this item and press <Enter> to view the following screen:
**LCD Control**

Scroll to this item and press <Enter> to view the following screen:

<table>
<thead>
<tr>
<th>LCD Control</th>
<th>LCD Panel Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary IGFx Boot Display</td>
<td>LCD</td>
</tr>
<tr>
<td>Secondary IGFx Boot Display (LVDS)</td>
<td>LCD Panel Type (1920 x 1080 8 bit  Dual LVDS)</td>
</tr>
<tr>
<td>Select the Video Device which will be activated during POST. This has no effect if external graphics present. Secondary boot display selection will appear based on your selection. VGA modes will be supported only on primary display.</td>
<td></td>
</tr>
<tr>
<td>Select the secondary IGFx video device.</td>
<td></td>
</tr>
<tr>
<td>Select the video device which will be activated during POST. This has no effect if external graphics present. Secondary boot display selection will appear based on your selection. VGA modes will be supported only on primary display.</td>
<td></td>
</tr>
<tr>
<td>Select the primary IGFx video device.</td>
<td></td>
</tr>
<tr>
<td>Select the secondary IGFx video device.</td>
<td></td>
</tr>
<tr>
<td>LCD Panel Type (1920 x 1080 8 bit Dual LVDS)</td>
<td></td>
</tr>
<tr>
<td>This option is used to choose the resolution of the Flat Panel.</td>
<td></td>
</tr>
<tr>
<td>LVDS (Enabled)</td>
<td></td>
</tr>
<tr>
<td>Use this item to enable or disable the LVDS video signal output.</td>
<td></td>
</tr>
<tr>
<td>VGA Output Select (Forced)</td>
<td></td>
</tr>
<tr>
<td>This option is used to choose VGA signal output, the available options are Forced and Auto.</td>
<td></td>
</tr>
</tbody>
</table>
South Bridge
Scroll to this item and press <Enter> to view the following screen:

![South Bridge Configuration Screen]

**Azalia HD Audio**
Use this option to control detection of the Azalia device.
- **Azalia controller (Enabled)**
  - Disabled: Azalia will be unconditionally disabled.
  - Enabled: Azalia will be unconditionally enabled.
  - Auto: Azalia will enabled if present disabled otherwise.

**USB Configuration**
Use this option to configure USB settings.
- **XHCI Mode (Auto)**
  - This item allows you to select the mode of operation of xHCI controller.

**Onboard LAN1/LAN2 (Enabled)**
This item allows you to enable or disable the onboard LAN1 or LAN2.

**Restore AC Power Loss (Power on)**
This item allows you to select AC power state when power is re-applied after a power failure.

**PCI Express Wakeup (Enabled)**
This item allows you to enable or disable PCI Express Wakeup feature.

Press <Esc> to return to the Chipset Menu screen.
8.5 Security Menu

The Security Menu allows you to set Administrator and User password.
If ONLY administrator password is set, it only allow access to setup when entering setup.
If ONLY the user’s password is set, power on password must be entered to boot or enter Setup. In Setup, user will have administrator rights.
The password length must be in the following range: Minimum length:3, Maximum:20.
8.6 Boot Menu

The Boot Menu allows changing in the system boot options.

**Bootup Num-lock State (ON)**
If this item is set to “On”, it will automatically activate the Numeric Lock function after boot-up.

**UPS FUNCTION (OFF)**
This item allows the Uninterruptible Power System(UPS) setting. Set this item to “OFF”, work well with the system unit using battery power when sudden power lost occurs. this item “ON” automatically power off without any damage on the data of the hard disk.

**Quiet Boot (Enabled)**
This item allows bootup screen options to be modified between POST messages or the OEM logo.Select “Disabled” to display POST messages. Select “Enabled” to display the OEM logo instead of the normal POST messages.

**Fast Boot (Disabled)**
This item enables BIOS to skip certain tests in order to speed up the boot sequence. This feature has two options: [Enabled] [Disabled].

**PXE Boot(Disabled)**
This item allows the execution of UEFI and Legacy PXE OpROM.

**Boot Option Priorities**
This item allows system boot order selection.
8.7 Save & Exit Menu

The Save & Exit Menu save and exit the setup utility.

<table>
<thead>
<tr>
<th>Save Changes and Exit</th>
<th>Exit system setup after saving the changes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discard Changes and Exit</td>
<td></td>
</tr>
<tr>
<td>Save Changes and Reset</td>
<td></td>
</tr>
<tr>
<td>Discard Changes and Reset</td>
<td></td>
</tr>
<tr>
<td>Save Options</td>
<td></td>
</tr>
<tr>
<td>Save Changes</td>
<td></td>
</tr>
<tr>
<td>Discard Changes</td>
<td></td>
</tr>
<tr>
<td>Restore Defaults</td>
<td></td>
</tr>
<tr>
<td>Save as User Defaults</td>
<td></td>
</tr>
<tr>
<td>Restore User Defaults</td>
<td></td>
</tr>
</tbody>
</table>

Boot Override

<table>
<thead>
<tr>
<th>UEFI: BUILT-in EFI Shell</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UEFI: KingstonDataTraveler 2.01.00, Partition 1</td>
<td></td>
</tr>
<tr>
<td>KingstonDataTraveler 2.01.00</td>
<td></td>
</tr>
<tr>
<td>Launch EFI Shell from filesystem device</td>
<td></td>
</tr>
</tbody>
</table>

Save Changes and Exit

The following message, “Save configuration changes and exit setup?” Select [OK] to save changes and exit the UEFI SETUP UTILITY.

Discard Changes and Exit

The following message, “Discard changes and exit setup?” Select [OK] to exit the UEFI SETUP UTILITY without saving any changes.

Save Changes

Use this item to save changes made to the BIOS options and reset the system.

Discard Changes

Use this item to exit the system without saving changes made to the BIOS configuration setup program.

Restore Defaults

This option restores all BIOS settings to the factory default. This option is useful if the controller exhibits unpredictable behavior due to an incorrect or inappropriate BIOS setting.

Save as user defaults

Use this item to save settings as user defaults.

Restore User defaults

Use this item to restore user defaults.

Boot Override

This option lists all booting options; users may choose one of the options and press <Enter>, then you may boot according to the option.
Care and Maintenance

Regular maintenance of the AMW-1321AX-E01 Mobile Operator Terminal Station can help prevent damage or downtime.

Service should be performed by qualified and authorized personnel. Make sure the computer is powered down and unplugged before removing the cover or working on internal components.

- Keep the AMW-1321AX-E01 Mobile Operator Terminal Station in a dry, clean space. Minimize exposure to dust, power switches or other controls should never be wet.
- If the unit gets wet, power it off immediately. Wait for the unit to dry completely before powering it on again.
- If you move it from a very cold environment to a warm environment, give the components time to reach room temperature before powering it on.
- Clean the exterior surfaces of the unit with a soft, damp cloth. Never use alcohol, paint thinner or benzene to clean this unit.
- Occasionally remove dust from interior surfaces, taking care not to touch or damage connections or chips.
- Position your system unit away from direct sunlight, moisture, dust, oil and thoroughfare.
- Never expose the unit to harsh jarring.
- Ensure that all ventilation outlets are always free from obstruction.
- To protect components against damage from static electric discharge, you should: Use a grounding wrist strap. The strap will have an “alligator”clip at the end of a shielded wire lead. Clip it to a grounded object. Put on and connect the strap before you handle the components. Also, you can use an anti-static pad. Put any components on the pad whenever you work on them outside the computer. If you don’t have a pad, put the components on the anti-static bag.
- Back up all the critical data, in a situation of unit being moved there are chances of hard disk getting damaged Before moving, remove all data disks from the drive, turn off the computer and all peripherals. Also unplug the power and disconnect cables.
- In the event of mechanical/power failure or damage, do not attempt to repair the system unit or wires. Refer all such problems to experienced personnel.
- If the industrial microbox computer needs service, please consult the authorized dealer through the contact information provided on the warranty card. Faulty service may void the warranty.
Appendix A: Exploded Drawing

NUT_M5_NYLON * 6pcs
NUT_M5_NYLON * 4pcs
#8-32_P_8L_SCREW * 4pcs
ARJ7C66_WASHER_WATER_PROOF * 6pcs
ARJ7C67_WASHER_WATER_PROOF
KB-115A
ARP-3821AX-E01
#8-32_P_8L_SCREW
Appendix B: Product Limited Warranty

Arista AMW-1321AX-E01 Mobile Operator Terminal Station+ sold in the U.S.A and Canada comes with a two-year warranty. Arista warranty obligations for its products are limited to the terms & conditions listed below.

B-1. Limited Warranty Coverage

- If the purchased product does not work due to defect in materials, starting after three years from the date of purchase (invoice date), Arista Corporation will repair or replace with new or refurbished product or parts.
- Arista Corporation holds every right to decide for repair or replacement of any product or part. During the “labor” limited warranty period there will be no charge for labor and during the “parts” limited warranty, there will be no charge for parts.
- Customers should ship the defective product or parts to Arista Corporation at their expense. After repair or replacement, Arista will pay for shipping via UPS Ground back to the customer.
- This limited warranty applies to products and services only in the North America region. Arista Corporation will not pay for any shipping for product or parts for any location outside of United States.

B-2. Exclusions and Limitations

- Limited warranty is applicable to defect in material or workmanship, it does not cover any general wear and tear, or cosmetic damaged.
- Damage due to external causes, including, but not limited to, failures which are caused by products not supplied by Arista Corporation. Also adding or altering any component without any prior concurrence from Arista Corporation technical support.
- Limited warranty does not apply to damages caused by failure or negligence, this include accidents, misuse, abuse, mishandling, misapplication, alteration, faulty installation, set-up adjustment, improper maintenance, power surge issues with electrical stability, failure to maintain environmental conditions specified by the manufacturer, wrong attempt to relocate the system, lightning damage, modification, product servicing from unauthorized providers, inappropriate product usage without referring to the manual or instructions and any other change in product component without prior guidance from Arista Corporation technical support.
- Any signs of tempering/altering with serial number will void this warranty.
- There is no expressed warranty except as stated under “Limited Warranty Coverage”. Under no equitable theory shall Arista Corporation be held liable for monetary and/or non-monetary damage resulting from normal or abnormal usage of our products. Use, distribution and/or similar engagement of our products constitute implied agreement to these and similar Arista Corporation limited liability policies.

B-3. Technical Support

- Arista Corporation entire team is dedicated towards customers’ needs and requirements. Arista’s technical support team is available to resolve customer issues over phone and email. If required, an RMA number is issued to resolve.
- Also, customers are required to keep the product serial number handy when reaching the technical support.
- Arista Corporation technical support can be reached at Monday through Friday 8:00am to 5:00PM PST at 510-226-1800 ext.400, Fax 510-226-1890 or email support@goarista.com.
B-4. RMA (Return Material Authorization) Procedures

- All return requests are provided with a number, please contact Arista customer service or complete RMA request form to obtain a number before returning any products or parts.
- Returns will be authorized in accordance with the following policy: If it is deemed that the unit/part should be returned, Arista's customer service representative will give the customer a return authorization number and ship to address to return the product.
- Products will not be accepted by Arista RMA department if it is not accompanied by a valid RMA number. It should clearly marked on the outside of the package.
- Products must be returned within 30 days after the date of when RMA number was issued. After the 30-day period, the RMA number issued will be invalid. Please do not return products with an invalid RMA number; contact Arista's customer service representative if your RMA number is invalid. Customer service can be reached at Monday through Friday 8:00am to 5:00PM PST at 510-226-1800 ext.400,Fax 510-226-1890 or email support@goarista.com.
- Warranty Returns
  - All returning products should be under applicable warranty period. After warranty period is over, the original product will be returned to the customer.
  - The RMA number for Warranty Return will be issued within 24 hours from the time RMA application form is received by Arista.
- Non-Warranty Returns
  - If the customer wishes to return a product for repair that is no longer within the warranty period, or any kind of damage not covered by the warranty, an Arista sales representative will inform the customer of the estimated cost of the repair.
  - Return of the product will be counted as the authorization to repair and agreement to pay for the cost of repair, whether or not it exceeds the original estimate.

B-5. RMA Credit Policy

Returns for Credit & Credit Types

- Returns for credit that require Arista's management approval may take up to 48 hours for processing/approval. Products can be returned for credit with the following conditions:
- Dead on Arrival (DOA): The customer must report DOA units to Arista's RMA department within 14 calendar days after the product is received. Customer can request either return for credit or replacement. If replacement is requested, Arista will ship the replacement in 7 calendar days and invoice the customer for the replacement. A credit memo will be issued to the customer after the DOA product is received and verified.
- Evaluation Return: The customer must notify Arista's RMA department before or at the end of the evaluation period if the customer decides to return the evaluation unit. An RMA number must be obtained from Arista prior to returning the unit.
- Short Shipment: The customer must report for any item received short-shipped or wrong products received in 7 calendar days after the product is received. The customer can request either: shipment of missing items, replacement of wrong items or return for credit. If shipment of missing items or replacement of wrong items is requested, Arista will ship the replacement in 7 calendar days. A credit memo will be issued to the customer after the returned product is received and verified.
- Non-Open-Box Return: In the event where a customer places an incorrect order, over stock or double orders, the customer can request return for credit with the following restocking fees applied.
Restocking Fee: A 15% restocking fee will apply to non-open-box returns when returned within 3 months after invoice date. A 30% restocking fee will apply to non-open-box returns returned within 6 months. Beyond 6 months after invoice date, a 50% restocking fee will apply to non-open-box returns returned within 12 months. Beyond 12 months after invoice date, Arista will not grant authorization to return non-open-box returns for credit.

Return Condition: All valid returns for credit products must be returned in its original packaging and in good condition along with all the items and accessories originally shipped with the product. Any damages will be assessed and the cost of repair or refurbishment will be deducted from the credit issued.

No Credit DOA: No credit will be given to the customer for DOA products received by Arista beyond 30 calendar days after the invoice date. No credit will be given to all non-cancellable, non-returnable, custom order parts.

B-6. RMA Transportation Policy
Transportation Charges

- All customers are responsible for all freight charges involved in shipping defective products back to Arista Corporation.
- Arista Corporation will cover the cost of returning products that are under warranty via UPS Ground to customers in the United States after repair or replacement.
- International customers are responsible for all transportation, insurance, customs and other similar charges for all returned products shipped outside of the United States and must ensure that the product is appropriately packed.
- Shipping damages resulting from improper packaging will be customer’s responsibility.
- Arista is not responsible for products lost during shipment. All products being returned for Limited Warranty repair or replacement must be sent freight prepaid.

Transportation Damages

- In cases of transportation damage, the customer is responsible for filing all claims with the shipping carrier.
- To avoid any potential risk that an RMA product is lost or damaged while in transit to Arista, it is recommended that the customer insures and declares the full value of the RMA product. The customer is 100% responsible for the RMA product while in transit to Arista.
- We urge customers to pack the RMA product carefully to avoid transit damage.

Refused Shipment Restocking Fees

- If a customer refuses a shipment, credit will be issued only after the refused product is received and verified by Arista. The shipping charge plus 15% restocking fees will be billed to the customer.
B-7. RMA Transportation Policy

Product Non-Acceptance

- Products will not be accepted by Arista Corporation if not accompanied by a valid RMA number, which must be clearly marked on the outside of the package.
- Any products refused by Arista will incur fees and/or charges applied by the shipping carrier, and shall be the sole liability of the original shipper.

Sample RMA Shipping Label

ARISTA CORPORATION
Attention: RMA Department
40675 Encyclopedia Circle
Fremont, CA 94538
RMA: # _______________

Package Identification

- Each box must have reference for the following information: Customer/Contact Name • Return Address have Phone Number • RMA Number (issued by an authorized ARISTA source).
- The RMA number must be written on the outside of the shipping container for identification purposes.
- Shipments not properly identified will be refused.
- To avoid any discrepancy of items received, please do not return accessories (manuals, driver CDs, OS CDs, cables, etc.) with the RMA unit in need of repair.
- If available, use the original box/packaging to ship back RMA units to avoid transit damage.

RMA Rejection Policy

Arista reserves the rights to return any RMA product received that does not comply with the information given on the original Return Material Authorization (RMA) request, such as:

- Invalid RMA number
- RMA number not visible and/or not on the box shipping label
- RMA condition described by the customer differs from the actual condition of the product
- Expired RMA number
- Unauthorized return (no RMA # was issued)
- No Arista serial number on the product
- Product is physically damaged
- If you have any questions regarding Arista’s RMA procedures, product return policies and/or other similar issues, please call Arista’s Customer Service and RMA Department during office hours, Monday through Friday (8:30am-5:30pm PST)

Phone: (510) 226-1800 ext. 400
Fax: (510) 226-1890
Email: rma@goarista.com
B-8. Arista’s Limited Liability

Product Non-Acceptance

• Arista Corporation is not liable for incidental or consequential damages resulting from the use of Arista products or arising out of any breach of Arista’s full limited warranty.

• Under no equitable theory shall Arista Corporation be held liable for monetary and/or non-monetary damages resulting from the normal or abnormal usage of our products. Use, distribution and/or similar engagement of our products constitute implied agreement to these and similar Arista Corporation Limited Liability policies.

• Arista Corporation is not liable for damages or reimbursement for lost time, lost revenue, and cost of having someone remove or re-install an installed unit if applicable, or travel to and from the service providers.

• All expressed and implied warranties, including the limited warranty of Merchantability are limited to the period of the limited warranty, unless, otherwise, indicated in writing by Arista Corporation.

B-9. Customer Responsibilities

• By requesting service, the eligible customer acknowledges the terms of the limited warranty, including the disclaimer and limitation of liability provision.

• Prior to seeking service, customers must back-up all data, programs, files and/or similar digital documents that may become damaged and/or lost due to service.

• Arista Corporation, WITHOUT LIMITATION, is not responsible for lost, damaged or otherwise destroyed data due to service.
Appendix C: Disposal and Recycling Information

Arista ARP-3821AX-E01 waterproof industrial panel computer must be disposed as per the local laws and regulations applicable to that location. Once the product reaches end of its life cycle and needs to be disposed, local authorities should be contacted for appropriate options.

This symbol on the product or in the manual means that electrical or electric equipment should be disposed at the end of its life-cycle separately and not in the regular household waste. There are separate collection systems for recycling in the EU. For more information, please contact your local authorities or your retailer where you purchased the product.
Appendix D: Disclaimer and Copyright Notice

Disclaimer
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