



CLEAR Stick Atlas

USER GUIDE

Model PXU1960

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Getting Started

What's In The Box?



CLEAR Stick Atlas



Quick Start Guide

Features & Indicators



- **Signal Strength LEDs** – Provide a quick reference indication of the CLEAR 4G signal quality for the current location
- **Status LED** – Indicates the status of the CLEAR 4G connection. Solid green indicates connected to 4G, solid amber indicates not connected, flashing amber indicates firmware update in progress and flashing green indicates connecting to 4G
- **Production Label** – Contains the manufacture date, regulatory marks, device MAC Address and other information such as serial number
- **Hardware Reset Button** – This button can be used in the rare cases where the device is unresponsive. See instructions for use under “Troubleshooting”
- **Auxiliary Antenna Connector Cover** – The cover can be removed to reveal two TS-9 antenna connects. See “Troubleshooting” for more information about how to improve your 4G signal when in marginal coverage areas

Getting Started (continued)

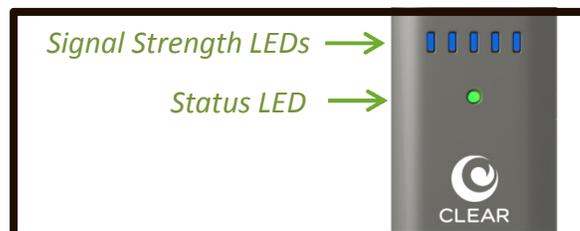
Use With Care

Always use your CLEAR Stick Atlas with care. Please consider the following when using the device:

- Take care do not drop the CLEAR Stick Atlas
- Keep the CLEAR Stick away from other devices that produce electromagnetic waves
- Keep the CLEAR Stick out of direct sunlight
- Do not throw or dismantle the CLEAR Stick
- Prevent pets and children from playing with the CLEAR Stick
- Do not immerse the CLEAR Stick in water or other liquid
- Make sure your hands are dry before handling the CLEAR Stick
- Do not cover or apply adhesives to the CLEAR Stick. They may cause the CLEAR Stick to overheat and may alter the antenna's performance
- Don't operate the CLEAR Stick while driving

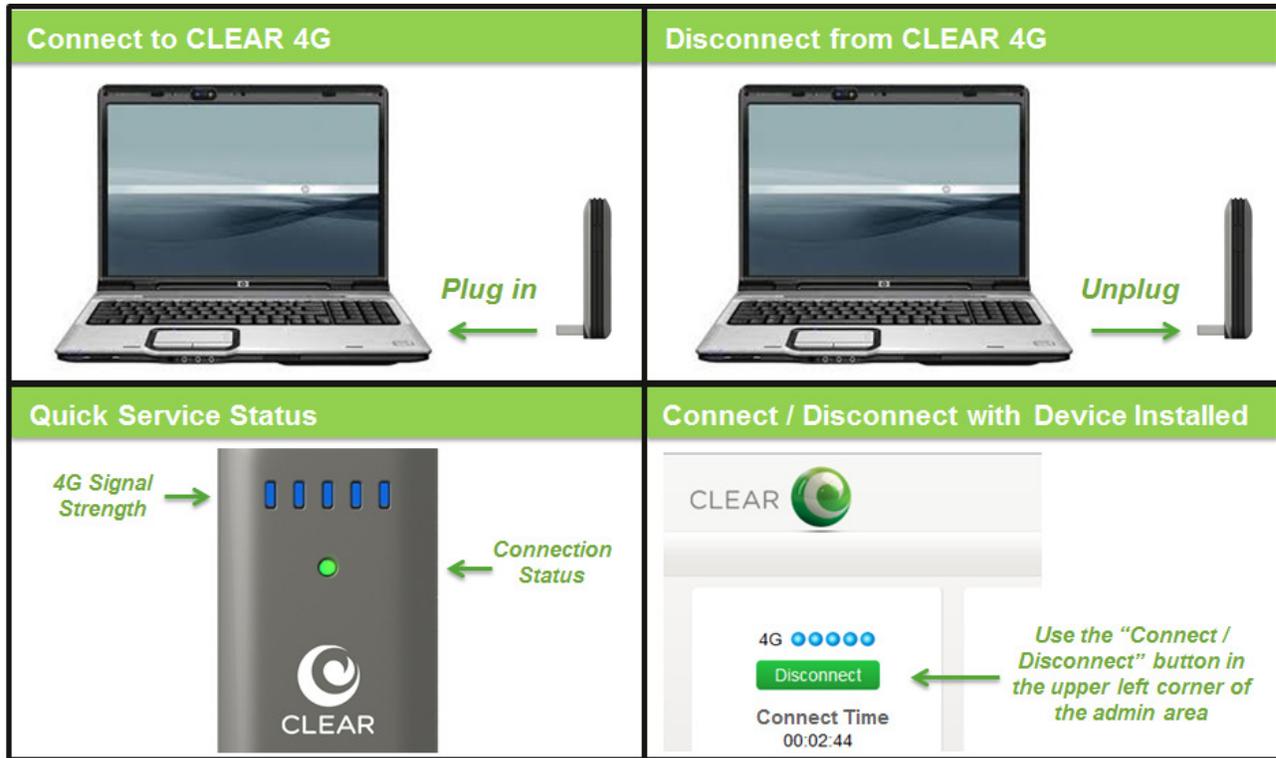
Connecting To CLEAR 4G Internet

- 1** Plug the CLEAR Stick into the USB port on your computer or other device. The device will power up and detect the computer's operating system.
- 2** The **Blue** Signal Strength LEDs will all light up and the center LED will flash briefly. The Status LED will be solid **Amber**. After a few seconds, the Signal Strength LEDs will move in a left to right "chase" pattern as the CLEAR Stick searches for a 4G signal. Once the signal is acquired, the LEDs show solid **Blue** and reflect the appropriate signal strength.
- 3** The status LED will change from solid **Amber** (disconnected) to flashing **Green** for a few seconds during network entry, then to solid **Green** (connected) when the device is connected to CLEAR 4G.
- 4** Each time you use the CLEAR Stick, your computer's operating system will apply the appropriate, native RNDIS or CDC driver and then connect to CLEAR 4G. The first time you use the device:
 - For Windows® XP, the Stick automatically installs an RNDIS driver since this does not exist natively for this operating system.
 - For Windows® 7 & Vista computers with *Autoplay* enabled, your computer's *Autoplay* dialog will display "CLEAR Stick Setup". Click this link to install a small application that will suppress *Autoplay* from popping up during subsequent uses of the CLEAR Stick Atlas. Note: the *Autoplay* suppression application is applied the next time your computer is restarted. It will only suppress *Autoplay* when using the CLEAR Stick.



Using Your CLEAR Stick Atlas

Connecting & Disconnecting from CLEAR 4G Internet



- To connect to CLEAR 4G Internet, plug the CLEAR Stick Atlas into the standard USB port of your computer or other device
- To disconnect, remove the CLEAR Stick Atlas from the USB port
- You can connect and disconnect while leaving the CLEAR Stick Atlas plugged into your computer's USB port by going to the administrative area and selecting the "Connect/Disconnect" button located in the upper left corner
- When using the CLEAR Stick Atlas you can quickly check the signal strength and connection status using the LEDs located on the device
 - Signal strength LEDs: 5 **Blue** LEDs = Excellent 4G signal
1 **Blue** LED = Poor 4G Signal
 - Connection LED: **Green** = Connected to CLEAR 4G,
Amber = Disconnected

Managing Your CLEAR Stick Atlas

Summary Page

To access the administrative area of the CLEAR Stick Atlas, open your browser and enter “clearstick” or “192.168.14.1” in the address bar. This will take you to the devices internal webserver and administration area’s Summary Page. The Summary Page provides a status of the 4G Service, the Device information and the 4G network.

Labels on the left side of the screenshot:

- Signal Strength LEDs
- Connection Time
- Navigation Menu
- Select English or Spanish Language

Label on the right side of the screenshot:

- Service Status Details

- Status – Displays the status of the connection such as “Connected to CLEAR 4G” or “Not Connected”
- CINR – Displays the CLEAR 4G Carrier Interference Noise Ratio (CINR) value
- RSSI – Displays the CLEAR 4G Received Signal Strength Indication (RSSI) value
- Tx – Displays the Transmit Power the device is utilizing to achieve the connection, measured in dB
- BSID – Displays the connected Base Station Identification (BSID) value
- Center Frequency – Displays the center value of the frequency for the current RF channel, measured in Hz

Label on the right side of the screenshot:

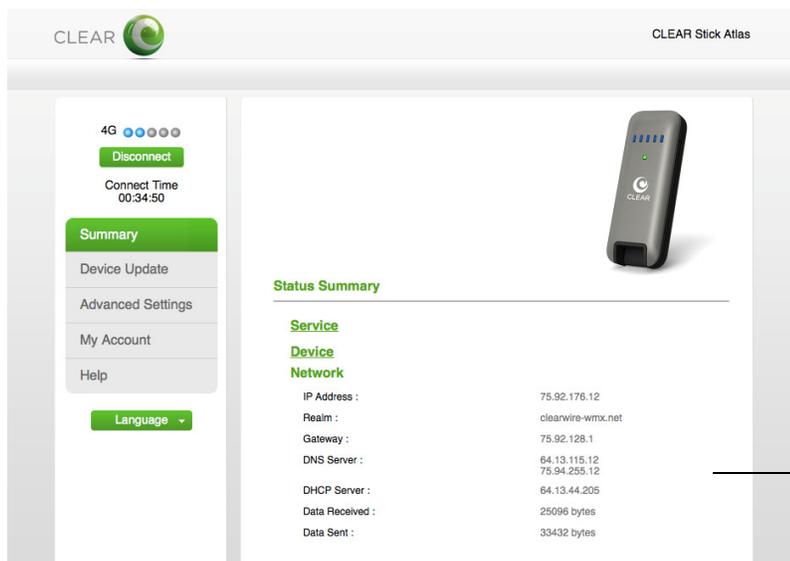
- Device Status Details

- Model – Displays the CLEAR Stick model number
- Manufacturer – Displays the manufacturer
- MAC ID – Displays the CLEAR Stick unique MAC Address number

Managing Your CLEAR Stick Atlas (continued)

Summary Page (continued)

- [Baseband Chip](#) – Displays the part number for the 4G chipset used in the CLEAR Stick Atlas
- [RF Chip Version](#) – Displays the Radio Frequency (RF) chip firmware version number
- [Library Version](#) – Displays the 4G chipset library version number
- [Firmware Version](#) – Displays the 4G chipset firmware version number
- [Software Version](#) – Displays the CLEAR Stick device software version number



Summary Page

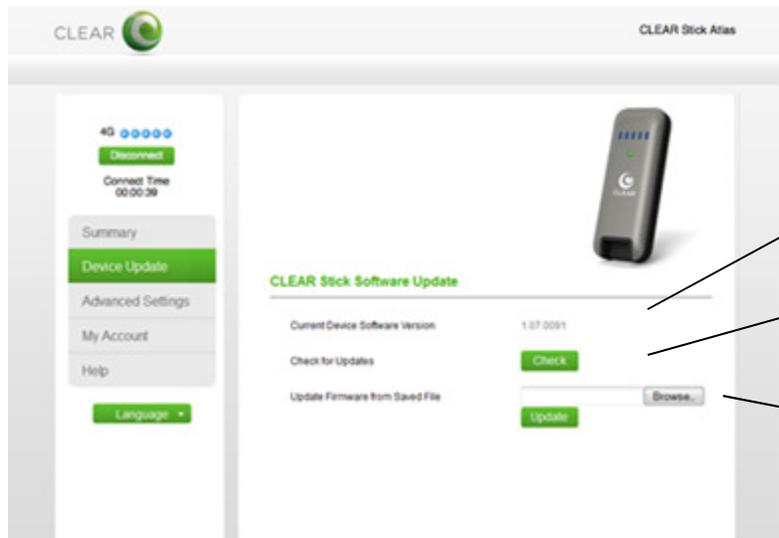
Network Status Details

- [IP Address](#) – Displays the Internet Protocol (IP) Address of the device
- [Realm](#) – Displays the network name for the CLEAR 4G service
- [Gateway](#) – Displays the Internet Gateway address
- [DNS](#) – Displays the Domain Name Server (DNS) addresses
- [DHCP](#) – Displays the Dynamic Host Configuration Protocol server address
- [Data Received](#) – Displays the approximate amount of data received by the device for the session
- [Data Sent](#) – Displays the approximate amount of data sent by the device for the session

Managing Your CLEAR Stick Atlas (continued)

Device Update Page

The Device Update Page enables you to check for available software updates or apply a software update file that has been downloaded from the clear.com/support website. In most cases, new software updates will be applied automatically during normal use of the device so you will rarely need to use these features



The screenshot shows the 'Device Update Page' for a CLEAR Stick Atlas. The page features a sidebar on the left with navigation options: Summary, Device Update (highlighted), Advanced Settings, My Account, and Help. A 'Language' dropdown is also present. The main content area is titled 'CLEAR Stick Software Update' and includes a small image of the device. Below the title, there are three sections: 'Current Device Software Version' showing '1.07.0001', 'Check for Updates' with a green 'Check' button, and 'Update Firmware from Saved File' with an 'Update' button and a 'Browse...' button. Annotations with arrows point to these elements: 'Current Software Version' points to the version number, 'Check for Software Updates' points to the 'Check' button, and 'Apply Software Updates Downloaded from clear.com/Support' points to the 'Update' button.

Device Update Page

Current Software Version

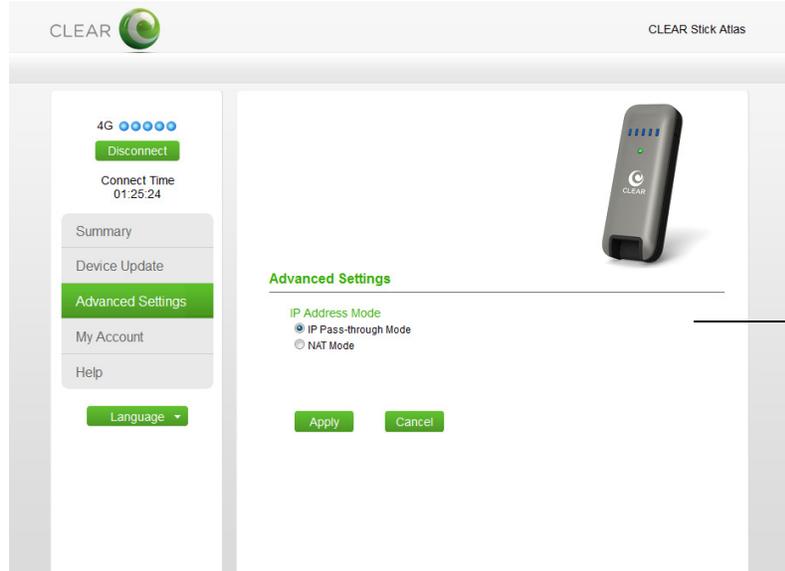
Check for Software Updates

Apply Software Updates Downloaded from clear.com/Support

Managing Your CLEAR Stick Atlas (continued)

Advanced Settings Page

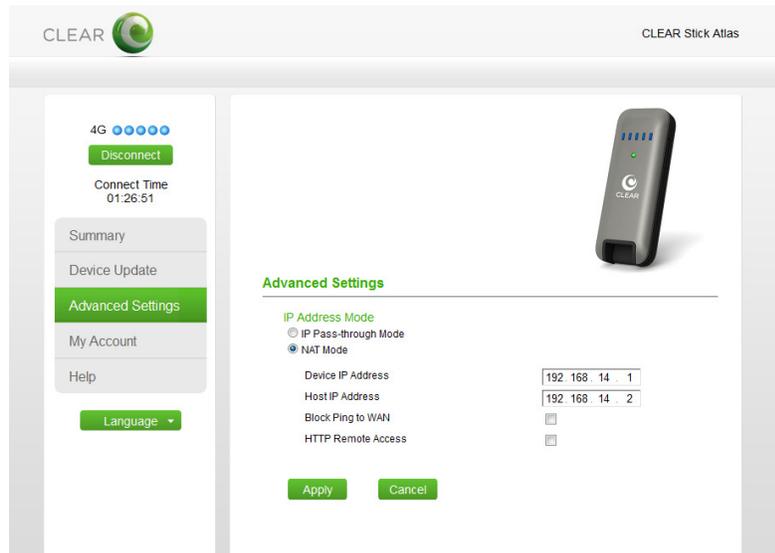
The Advanced Settings page allows you to alternate between IP Pass-through mode and Network Address Translation (NAT) mode. To apply NAT mode, select the NAT mode radio button and enter a local IP Address when requested. In almost all cases, IP Pass-through mode will work and this feature will rarely be used.



Advanced Settings Page

Alternate between IP Pass-through & NAT mode

- IP Pass-through Mode – The IP Address assigned to the device is also applied to the host computer
- NAT Mode – The IP Address applied to the device is different than the IP Address applied to the host computer



Advanced Settings Page

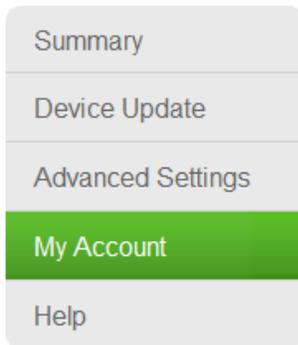
- Device IP Address – The Internet Protocol (IP) Address assigned to the device is user configurable
- Host IP Address – The IP Address applied to the host computer is user configurable
- Block Ping to WAN – Prevents Internet Control Message Protocol (ICMP) traffic from the host computer to the Wide Area Network (WAN)
- HTTP Remote Access – Enable/disable remote access to the host computer

Managing Your CLEAR Stick Atlas (continued)

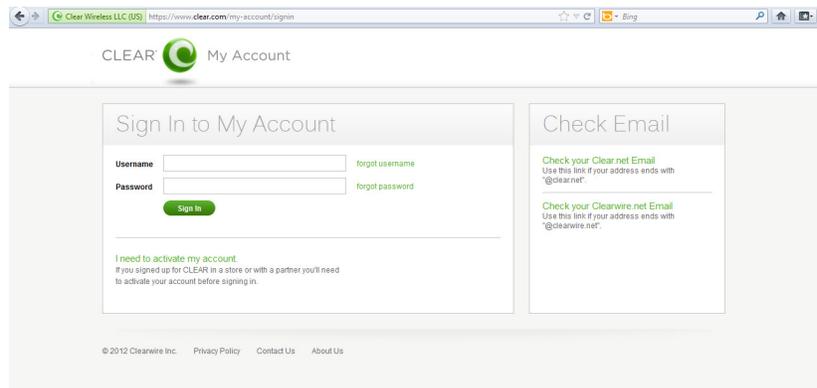
My Account

Selecting “My Account” on the Administration Area navigation menu opens a new browser window and directs you to the “My Account” sign in page at *CLEAR.com*. Enter your “My Account” user name and password to manage your CLEAR service account.

Navigation Menu



My Account Sign In Page on Clear.com



Managing Your CLEAR Stick Atlas (continued)

Help Page

The Help Page provides useful information that aids in using and troubleshooting your CLEAR Stick.



- [About CLEAR Stick](#) – This link displays device information including the hardware and software versions and MAC Address
- [Diagnostics](#)– Select this link to view the device logs. You can save a copy of the current device log to your computer desktop by selecting the “Export” button in the Diagnostics area. When troubleshooting your CLEAR Stick it may be necessary to email the saved log file to the CLEAR Customer Support team
- [Return to Factory Settings](#) – Select this link to change all device settings to the original state
- [Online Support](#) – This link opens a new browser window and directs you to the CLEAR Customer Support website
- [License](#) – This link displays information about 3rd party and public software licenses utilized in developing the CLEAR Stick
- [Regulatory Information](#) – This link opens a new browser window and directs you to information about the Federal Communications Commission approval for the CLEAR Stick Atlas
- [Important Information](#) – This link displays important safety information about your CLEAR Stick

Language Settings

Selecting the “Language” button below the administration area navigation menu enables you to change the language displayed on the administration area pages.



Frequently Asked Questions

Q. Does using the CLEAR Stick Atlas require connection manager software to run on my computer?

A. No connection manager software is required. In fact, no software is required at all. However, CLEAR does provide the option to install a very small application on Microsoft Windows® 7 and Vista computers to suppress the *Autoplay* feature from running each time you insert the Stick.

Q. Does the CLEAR Stick Atlas install device drivers on my computer?

A. No, the CLEAR Stick uses drivers that are already located in your Windows® and Mac® operating system and most versions of Linux, Android and Chrome.

Q. Which operating systems are supported by the CLEAR Stick Atlas?

A. The CLEAR Stick support Microsoft Windows® 7, Vista, Windows® XP (SP3), Apple Macintosh OS 10.5 Leopard, 10.6 Snow Leopard and 10.7 Lion. Versions of Linux, Android and Chrome that support Remote Network Driver Interface Specification (RNDIS) or Communication Device Class (CDC) also work with the CLEAR Stick.

Q. How do I manage my CLEAR Stick Atlas?

A. Plug the CLEAR Stick into your computer's USB port and enter "clearstick" or "192.168.14.1" in your browser's address bar. This will take you to the internal administrative area where you can review the status of the device and connection, check for software updates, modify settings and get help.

Q. How do I connect and disconnect from the Internet when using my CLEAR Stick Atlas?

A. Simply plug in the CLEAR Stick when you want to connect to CLEAR 4G Internet and unplug the Stick to disconnect. If you want to leave the Stick in your computer and disconnect from the Internet you can go to the CLEAR Stick Atlas management area and select "Disconnect" in the upper left corner. When you are ready to re-connect, select "Connect".

Q. What is the cover located on the right side of the CLEAR Stick used for?

A. Removing the cover exposes two TS9 auxiliary antenna connectors. These connectors support standard, 3rd party antennas that may improve your 4G signal reception when located in marginal signal areas. See the "Troubleshooting" section of this document for more information.

Q. I've heard there is a known Microsoft issue that can affect some CLEAR Stick Atlas users. How do I know if I'm affected?

A. There is a known Microsoft RNDIS issue that can affect a small percentage of Windows® 7 and Vista users. Fortunately, Microsoft offers hotfixes to resolve the problem. See the "Troubleshooting" section of this document for more information.

Technical Specifications



CLEAR Stick Atlas (front, back, side view)

IN-BOX MATERIALS

- CLEAR Stick Atlas
- Quick Start Guide

SUPPORTED OPERATING SYSTEMS

- Microsoft Windows® 7 (32/64 bit)
- Microsoft Windows® Vista (32/64 bit)
- Microsoft Windows® XP (SP3)
- Mac® OS 10.5 Leopard
- Mac® OS 10.6 Snow Leopard
- Mac® OS 10.7 Lion
- Linux*
- Android*
- Chrome*

PHYSICAL DIMENSIONS

- Closed: 3.25"(h) x 1.2"(w) x 0.65"(d)
- Opened: 4.06"(h) x 1.2"(w) x 0.65"(d)

WEIGHT

- 1.1 oz.

CONNECTORS

- Standard USB Type-A Male Connector
- TS-9 Auxiliary Antenna Connectors (2)

SKU/PART NUMBER

- UBE-USB1960

UPC CODE

- 0 94922 04207 1

* Computer or device must include a standard USB port and support for Remote Network Driver Interface Specification (RNDIS) or Communication Device Class (CDC) devices.

Troubleshooting

Important Message From CLEAR

If your browser is stuck on a message from CLEAR, follow the onscreen instructions to view the message and provide any requested information.

Restarting Your Computer With The CLEAR Stick Inserted

CLEAR recommends that you remove the CLEAR Stick Atlas from the computer's USB port when restarting your computer. Once your computer has restarted, re-insert your CLEAR Stick into the computer's USB port.

The CLEAR Stick LEDs Remain On When The Computer Is Off

Some computers continue to supply power to the USB port when the computer is in Sleep or Hibernate Mode. In such cases, the CLEAR Stick will remain on. If this occurs make sure your computer is connected to AC Power, or remove the CLEAR Stick from the USB port, in order to avoid draining your computer's battery.

Can't Connect To The Internet

If your CLEAR Stick appears to be connected to CLEAR 4G (one or more solid **Blue** signal strength LEDs and a **Green** Status LED), but you cannot connect to the Internet AND you are using a Windows® 7 or Vista computer, see the section below titled:

How to Recognize and Resolve the Known Microsoft RNDIS Issue Affecting Some Windows® 7 and Vista Users

If you are not using Windows 7 or Vista or the known Microsoft symptoms are not present on your Windows 7 or Vista computer, take the following steps:

1. Remove the CLEAR Stick from your computer's USB port
2. Wait 5 seconds
3. Reinsert the CLEAR Stick into your computer's USB port, wait for the device to connect to CLEAR 4G
4. Attempt to browse the Internet

If you still cannot connect to the Internet, go to the Administration Area of the CLEAR Stick and select "Help" then select "Return to Factory Settings". Reply "Yes" when prompted. The device will restart and connect to CLEAR 4G.

If you still cannot connect to the Internet or you cannot get to the Administrative Area of the device, contact CLEAR Customer Support at clear.com/support or by calling 877-956-4056.

The CLEAR Stick Appears "Frozen" or "Stuck"

If you are in a known CLEAR 4G coverage area and your CLEAR Stick appears to be stuck (no LEDs illuminated or the Status LED is shows **Amber** with one or none of the **Blue** Signal Strength LEDs illuminated, take the following steps:

1. Remove the CLEAR Stick from your computer's USB port
2. Wait 5 seconds
3. Reinsert the CLEAR Stick into your computer's USB port, wait for the device to connect to CLEAR 4G
4. Attempt to browse the Internet

If your CLEAR Stick remains unresponsive, go to the Administration Area of the CLEAR Stick and select "Help" then "Return to Factory Settings". Reply "Yes" when prompted. The device will restart and connect to CLEAR 4G.

Troubleshooting (continued)

If your CLEAR Stick is still unresponsive and you cannot get to the Administrative Area of the device, take the following steps:

1. Remove the CLEAR Stick from your computer's USB port
2. Wait 5 seconds
3. Reinsert the CLEAR Stick into your computer's USB port WHILE PRESSING AND HOLDING THE RESET BUTTON LOCATED ON THE BACK OF THE DEVICE
4. When the Status LED illuminates **Amber** release the RESET button
5. Wait for the CLEAR Stick to boot up and connect to CLEAR 4G, then attempt to browse the Internet

If this does not resolve the problem, contact CLEAR Customer Support at clear.com/support or by calling 877-956-4056.

How to Recognize and Resolve the Known Microsoft RNDIS Issue Affecting Some Windows® 7 and Vista Users

A small percentage of Windows® 7 and Vista users will experience a problem where the CLEAR Stick Atlas appears to be properly installed and working, but the user cannot access the Internet or pass IP traffic.

Known Microsoft Issue

Microsoft has documented two issues with their products where a USB RNDIS device, such as the CLEAR Stick Atlas, will stop communicating with the host computer when running Windows® 7, Vista and some server operating systems. Microsoft has published two "Hotfixes" that resolve these problems.

How to Recognize the Known Microsoft Issues

Before you attempt to resolve an issue, it is very important to be certain that you are experiencing the actual, documented problem. Fortunately, it's very easy to know for sure. Carefully read the following questions. If you answer "YES" to ALL of these questions then you do have the known Microsoft problem and CLEAR recommends that you install the "Hotfixes" available on the Microsoft Customer Support website using the links provided below. Note: do not install these hotfixes unless you answer "YES" to ALL questions. If you have questions or concerns regarding the hotfixes, please contact Microsoft Corporation.

Confirmation of the known Microsoft RNDIS issues

1. Is your CLEAR Stick Atlas installed in your computer's USB port?
2. Is the single, Status LED on and solid Green?
3. Are one or more Signal Strength LEDs on and solid Blue?
4. Are unable to access Internet websites such as CLEAR.com and others?
5. Are you running Microsoft Windows® 7 or Vista on your computer?
6. Follow the instructions titled "**Confirmation Step #1**" below, do you see a "Yellow Bang" next to the RNDIS device listed in Device Manager?
7. Follow the instructions titled "**Confirmation Step #2**" below, do you see the following message in the "Device Status": *The device is not working properly because Windows cannot load the drivers required for the device (Code 31)*

If you answered "YES" to all seven of the preceding questions you are experiencing the known Microsoft RNDIS issue. Please proceed by installing the two Microsoft Hotfixes located at the following links (Note: some users experience difficulty downloading the hotfixes. If you have trouble, please see the instructions below titled "**What to do if you have trouble downloading the Microsoft Hotfixes.**")

Microsoft "Hotfixes":

<http://support.microsoft.com/kb/2477042>

<http://support.microsoft.com/kb/2471472>

Troubleshooting (continued)

Known Microsoft RNDIS Issues (continued)

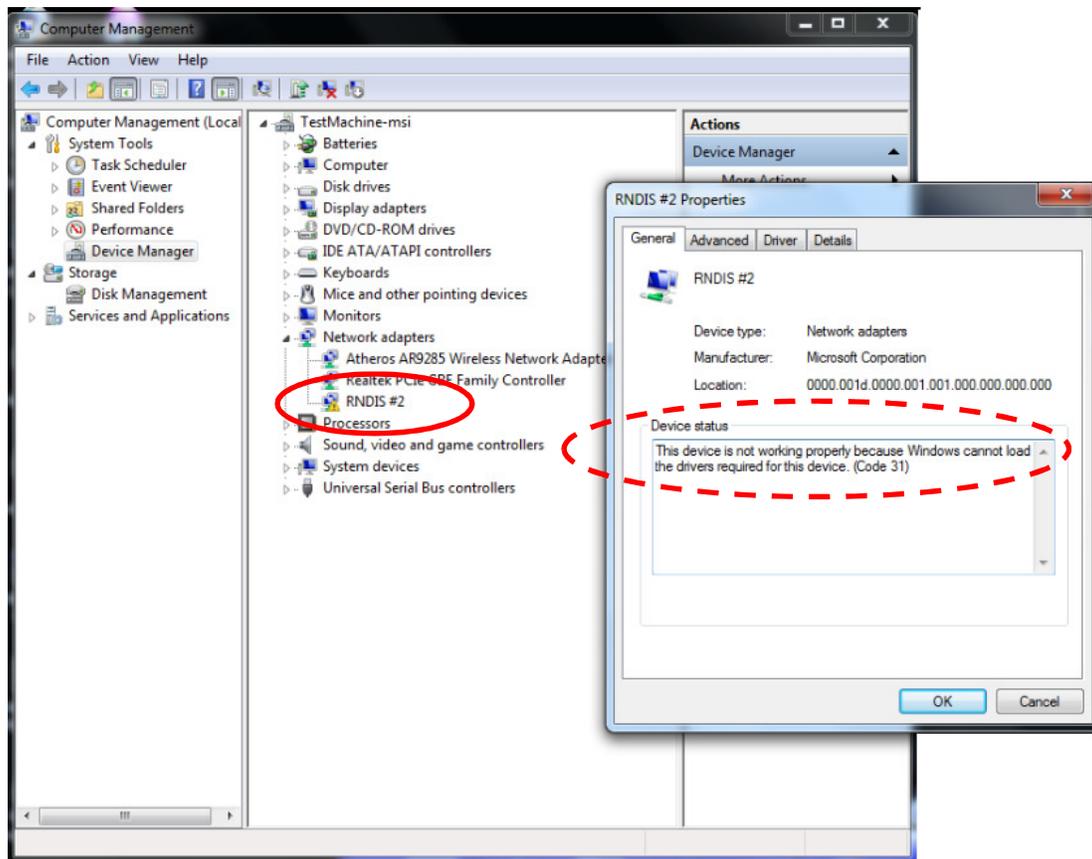
Confirmation Step #1

- In your Windows 7 or Vista operating system, go to “Device Manager”
- Locate the “Network adapters”
- Expand the list of adapters by clicking the small triangle to the left of the term “Network adapters”
- You will see an adapter listed as “RNDIS” or “NDIS” (there may be a number after it, but not always)
- Computers experiencing the known Microsoft issue will show a small, yellow triangle commonly called a “Yellow Bang” on RNDIS or NDIS adapter as depicted within the solid red circle in the *Exhibit #1* below

Confirmation Step #2

- In “Device Manager”, place your mouse on the line titled “Network adapters”
- Right click and select “Properties”
- Computers experiencing the known Microsoft issue will show the following message under the “Device Status” area: *The device is not working properly because Windows cannot load the drivers required for the device (Code 31)* as depicted within the dashed red circle in the Exhibit #1 below

Exhibit #1



Troubleshooting (continued)

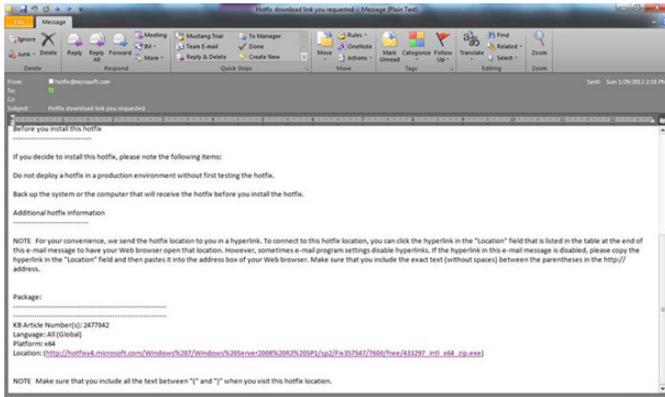
What To Do If You Have Trouble Downloading the Microsoft Hotfixes

When you register with Microsoft to receive the hotfix on the Microsoft Support Website you will receive an email with a link to download the hotfix as shown in *Screen Shot #1* below. Note that there is no mention of a user name and password being required in order to receive the hotfix.

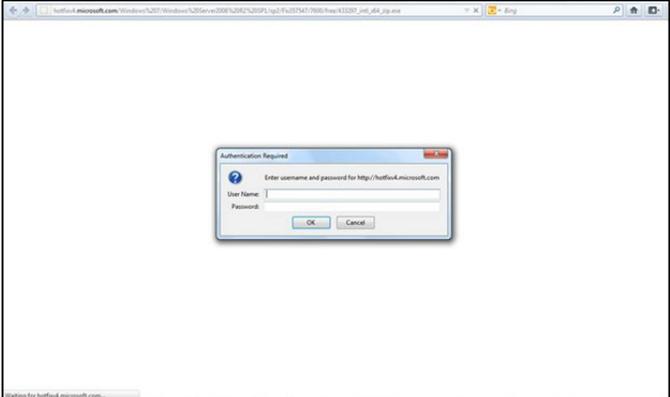
Most of the time, selecting the link results in the appropriate hotfix file being downloaded as shown in *Screen Shot #4* below. However, in some cases you may receive an authentication requests as shown in *Screen Shot #2*. If this happens, do the following:

- Select the "Cancel" button on the Authentication Dialog Box multiple times. In most cases this will result in receiving the hotfix file along with an error message as shown in *Screen Shot #3*. Disregard the error message and install the hotfix.
- Alternatively, you can click the link in the request email (shown in *Screen Shot #1*) multiple times and, eventually, you will receive the hotfix file without as shown in *Screen Shot #4*. Install the hotfix file.

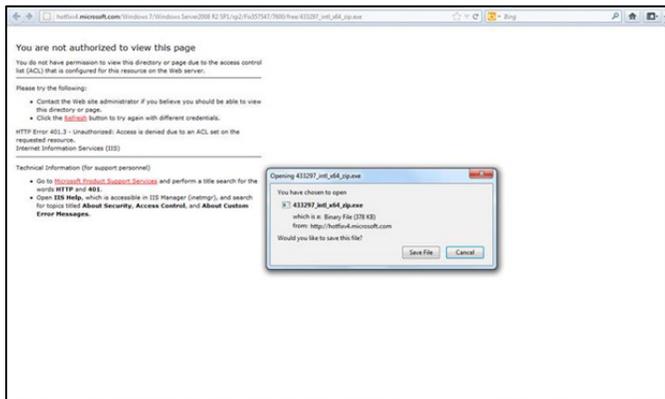
Screen Shot #1



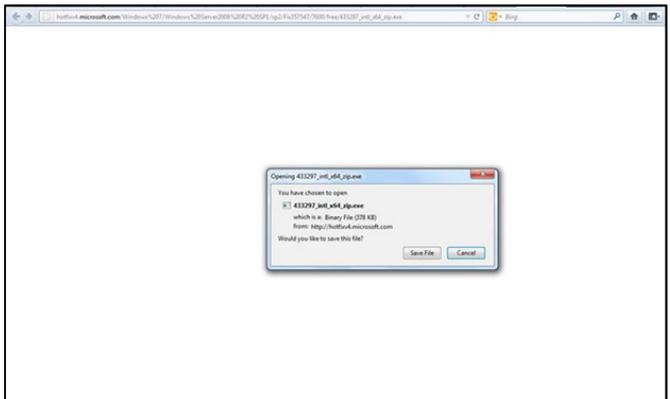
Screen Shot #2



Screen Shot #3



Screen Shot #4



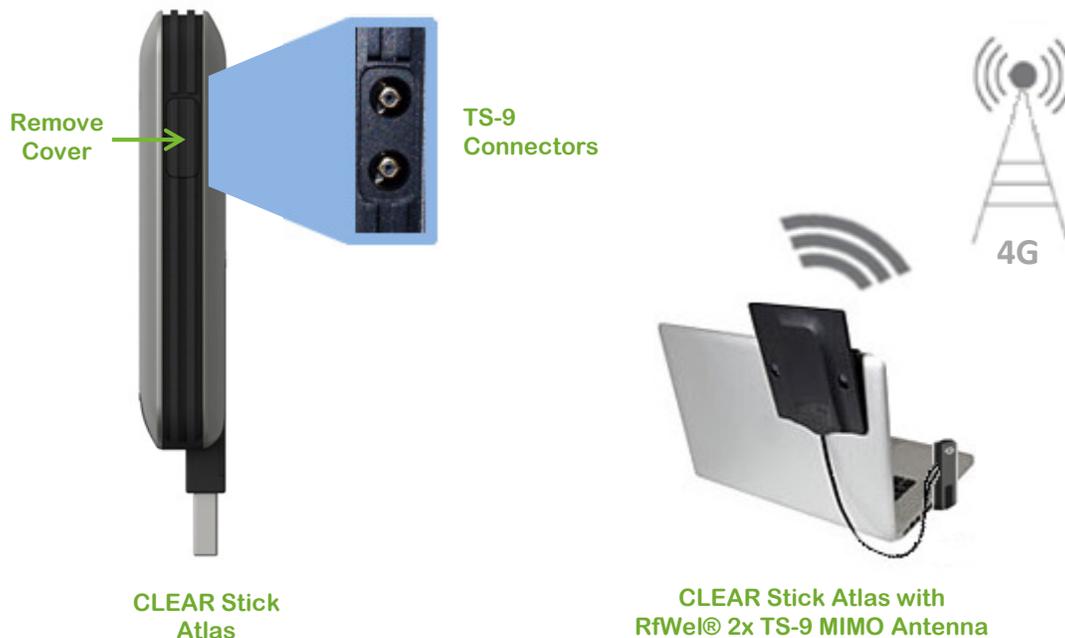
Troubleshooting (continued)

Improving Your Indoor 4G Signal

For the best indoor signal locate your CLEAR Stick near a window or outside wall. It's always a good idea to try several locations within your home or office to determine where the best signal is located. Use the **Blue** Signal Strength LEDs to help you determine the best location. The more LEDs illuminated, the better the 4G signal.

Auxiliary Antenna

For CLEAR Stick Atlas owners who find themselves within marginal service coverage areas, it may be possible to improve your 4G signal and internet speed using an auxiliary antenna. To do so, attach the antenna via the two TS-9 connectors located on the side of the device.



Note that using an auxiliary antenna will not improve your internet experience in all cases. Only use an auxiliary antenna if your 4G signal conditions show a Carrier Interference Noise Ratio (CINR) of 8 dB or lower. Using an auxiliary antenna when CINR is above 8 dB may result in a WORSE internet experience. To locate the 4G signal conditions on your CLEAR Stick Atlas, go to the admin area and note the CINR value on the Summary Page (see the user guide located at clear.com/support for detailed instructions). Should you elect to use an auxiliary antenna, be sure to test the antenna in several different locations throughout your home or office in order to identify the location that yields the best results (i.e. highest CINR value).

While CLEAR does not sell auxiliary antennae, we have tested the CLEAR Atlas with the RfWeI® TS-9 MIMO Antenna (SKU 6000450) and found it to perform well. MIMO antennae with two TS-9 connectors can be purchased at a variety of retail locations and at numerous internet websites. Search the internet for "MIMO Antenna with 2 TS-9 connectors" to locate a suitable supplier.

Still Need Help?

FAQs and Live Chat Support

If you have questions about your CLEAR Stick Atlas, please access the FAQs and live chat support at www.clear.com/support.

Telephone Support

If you still have questions, please call us at 877-956-4056. We provide automated telephone support 24/7 and live telephone support between 9am and 10pm, local time, seven days a week.

Questions About Your Automated Billing

When you set up your CLEAR online account, you most likely provided CLEAR with a credit card number so CLEAR can automatically bill for service. It's easy to view your bill or change the bank card information. While connected to the internet, click [here](#) to login to your CLEAR My Account or enter https://www.clear.com/my_account/signin.php in your browser's address bar the next time you are connected to the Internet.

Important Information

Please read the "Important Information" section in the Administration Area of your CLEAR Stick for regulatory information, safety information, and other important disclosures.

Warranty Information

See Section 6(d) of the CLEAR Terms of Service (at www.clear.com/legal/terms) for warranty details.

Legal Disclosures

CLEAR coverage areas are limited. Actual CLEAR network performance may vary and is not guaranteed. See clear.com for rate plan, return policy, and additional information and restrictions. CLEAR and the CLEAR logo are trademarks or registered trademarks of Clearwire Communications LLC. Other company, product, and brand names and trademarks are the property of their respective owners. © 2012 Clear Wireless LLC. All rights reserved.