SAFETY AND COMPLIANCE

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. THE UNIT MUST NOT BE EXPOSED TO DRIPPING OR SPLASHING. DO NOT PLACE OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ON THE UNIT.

CAUTION: TO ENSURE REGULATORY COMPLIANCE, USE ONLY THE PROVIDED POWER AND INTERFACE CABLES.

CAUTION: DO NOT OPEN THE UNIT. DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE INSTALLATION AND TROUBLESHOOTING INSTRUCTIONS. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

This device must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

Postpone Wireless Access Point installation until there is no risk of thunderstorm or lightning activity in the area.

Do not overload outlets or extension cords, as this can result in a risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard.

Route power supply cords so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords where they are attached to plugs and convenience receptacles, and examine the point where they exit from the product.

Place this equipment in a location that is close enough to an electrical outlet to accommodate the length of the power cord.

Place this equipment on a stable surface.

When using this device, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- Read all of the instructions before you operate this equipment. Give particular attention to all safety precautions. Retain the instructions for future reference.
- Comply with all warning and caution statements in the instructions. Observe all warning and caution symbols that are affixed to this equipment.
- Comply with all instructions that accompany this equipment.
- Avoid using this product during an electrical storm. There may be a risk of electric shock from lightning. For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet, and disconnect the cable system. This will prevent damage to the product due to lightning and power surges.
- Operate this product only from the type of power source indicated on the product's marking label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in safe operating condition.

It is recommended that the customer install an AC surge protector in the AC outlet to which this device is connected. This is to avoid damaging the equipment by local lightning strikes and other electrical surges.

Different types of cord sets may be used for connections to the main supply circuit. Use only a main line cord that complies with all applicable product safety requirements of the country of use.

Installation of this product must be in accordance with national wiring codes.

Place unit to allow for easy access when disconnecting the power cord/adapter of the device from the AC wall outlet.

Wipe the unit with a clean, dry cloth. Never use cleaning fluid or similar chemicals. Do not spray cleaners directly on the unit or use forced air to remove dust.

This product was qualified under test conditions that included the use of the supplied cables between system components. To be in compliance with regulations, the user must use these cables and install them properly. Connect the unit to a grounding type AC wall outlet using the power adapter supplied with the unit.

Do not cover the device, or block the airflow to the device with any other objects. Keep the device away from excessive heat and humidity and keep the device free from vibration and dust.

Installation must at all times conform to local regulations.

FCC COMPLIANCE CLASS B DIGITAL DEVICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by ARRIS for compliance could void the user's authority to operate the equipment.

For operation within 5.15 ~5.25GHz /5.25 ~5.35GHz/5.47 ~5.725GHz frequency range, it is restricted to indoor environment. The band from 5600-5650MHz will be disabled by the software during the manufacturing and cannot be changed by the end user. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Firmware setting is not accessible by the end user.

FCC DECLARATION OF CONFORMITY

ARRIS Enterprises, Inc., 101 Tournament Drive, Horsham, PA 19044, 1-215-323-1000, declares under sole responsibility that the VAP2500 complies with 47 CFR Parts 2 and 15 of the FCC Rules as Class B digital devices. These devices comply with Part 15 of FCC Rules. Operation of these devices is subject to the following two conditions: (1) These devices may not cause harmful interference, and (2) these devices must accept any interference that may cause undesired operation.

WIRELESS LAN INFORMATION

The VAP2500 products are wireless network products that use Orthogonal freguency-division multiplexing (OFDM) radio technology. These products are designed to be inter-operable with any other wireless OFDM type product that complies with:

- The IEEE 802.11 Standard on Wireless LANs (Revision A and Revision N), as defined and approved by the Institute of Electrical Electronics Engineers.
- The Wireless Fidelity (WiFi) certification as defined by the Wi-Fi Alliance.

WIRELESS LAN AND YOUR HEALTH

The VAP2500, like other radio devices, emit radio frequency electromagnetic energy, but operate within the guidelines found in radio frequency safety standards and recommendations.

RESTRICTIONS ON USE OF WIRELESS DEVICES

In some situations or environments, the use of wireless devices may be restricted by the proprietor of the building or responsible representatives of the organization. For example, using wireless equipment in any environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the applicable policy for the use of wireless equipment in a specific organization or environment, you are encouraged to ask for authorization to use the device prior to turning on the equipment.

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this product, or the substitution or attachment of connecting cables and equipment other than specified by the manufacturer. Correction of interference caused by such unauthorized modification, substitution, or attachment is the responsibility of the user.

The manufacturer and its authorized resellers or distributors are not liable for any damage or violation of government regulations that may arise from failing to comply with these guidelines.

FCC CERTIFICATION

The VAP2500 contains a radio transmitter and accordingly have been certified as compliant with 47 CFR Part 15 of the FCC Rules for intentional radiators. Products that contain a radio transmitter are labeled with FCC ID and the FCC logo.

Industry Canada statement:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme la norme d'Industrie Canada exempts de licence RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne peut pas causer d'interférences, et (2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

Caution:

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and

(iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

(iv) high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

(i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;

(iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

(iv) de forte puissance radars sont désignés comme utilisateurs principaux (c.-à-utilisateurs prioritaires) des bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer des interférences et / ou des dommages à dispositifs LAN-EL

De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

IMPORTANT NOTE:

Canada Radiation Exposure Statement:

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

NOTE IMPORTANTE: (Pour l'utilisation de dispositifs mobiles)

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

En vertu de la réglementation de l'industrie au Canada, cet émetteur radio peut fonctionner uniquement à l'aide d'une antenne d'un type et un maximum (ou moins) de gain approuvé pour l'émetteur par Industrie Canada. Pour réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisis afin que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas ce qui est nécessaire pour une communication réussie.

VAP2500

Wireless Access Point

Quick Start Guide

ARRIS

www.arris.com

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INSTALLATION

The VAP2500 enables you to transmit multiple standard- and high-definition video streams throughout your home wirelessly. You can enjoy a full range of video services and applications without having to run wires, lay cables, or drill holes. The VAP2500 uses one-button, Wi-Fi Protected Setup (WPS) technology to ensure easy, reliable installation.

FRONT PANEL

Power	Green = The VAP2500 is on. Red/orange = Device has failed the power on self test. Off = The VAP2500 disconnected from its power source.
WiFi	Red = Bandwidth is available for less than one device. Green = Bandwidth is available for more than one device. Fast flashing green = No client connected with an access point (access point only). Amber = Bandwidth is available for only one device. Off = No power or in POST.
WPS	Blinking Green = During WPS pairing (which has a two minute time out) then both devices' LEDs slow flash. If an access point has just finished pairing with a client and a second WPS session is started with another client, the access point will start its second slow flashing green after the 30 second time. Solid Green = WPS pairing is successful; the LED will turn solid green for 30 seconds and then turn off. Solid Amber = WPS pairing is unsuccessful, WPS LED stays solid amber. Off = WPS between access point and client was successful, or two minutes time out.
WPS	WPS button; invokes WPS processing when the button is pressed and released.

REAR PANEL

Reset Button	Resets the VAP2500 to its default settings.
Ethernet Port	Connects to the Ethernet-equipped Home Gateway.
Power Connector	Provides power to the VAP2500.

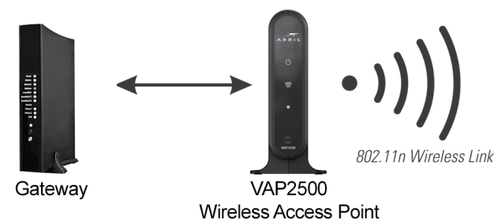
TROUBLESHOOTING	
POWER LED is red-orange	If any of the POST checks fail then the POWER LED will illuminate to give a red-orange color. If the red-orange POWER LED is on, then the unit is broken and needs to be replaced.
Solid green WPS LED	WPS association has failed (LED remains solid green for more than 30 seconds). If WPS is successful then the LED immediately turns solid green, stays solid green for 30 seconds, then turns OFF. Repeat step #4 under *Connect the Wireless Client*.
Flashing green WIFI LED	Failure to connect with AP. Call for technical support.

INSTALLING YOUR VAP2500

Follow the instructions below to install your Wireless Access Point and Client.

Step 1: Connect the Wireless Access Point

1. Connect one VAP2500 unit to your Gateway using the provided six-foot black with yellow tips Ethernet cable. Before you connect the VAP2500, ensure the Gateway is powered on.



2. Connect the power adapter to the VAP2500 and plug the adapter into a wall outlet. You'll see the unit's Power LED light go on, indicating the unit is powered

Step 2: Connect the Wireless Client

1. Connect one VAP2500 unit to your set-top using the provided six-foot black with yellow tips Ethernet cable. Before you connect the VAP2500, ensure the set-top is powered on.

2. Connect the power adapter to the VAP2500 and plug the adapter into a wall outlet. You'll see the unit's Power LED light go on, indicating the unit is powered.
3. Wait 60 seconds after powering the client, and then press and hold the WPS button on the front panel for two seconds. You will then have two minutes to activate the WPS on the access point.
4. Press the WPS button on the access point. If pairing is successful the WPS will light solid green for 30 seconds and then turn off.
5. Turn on TV at the client and view video. See Troubleshooting if this fails.

INSTALLING ADDITIONAL CLIENTS

Repeat steps 2-5 above.