

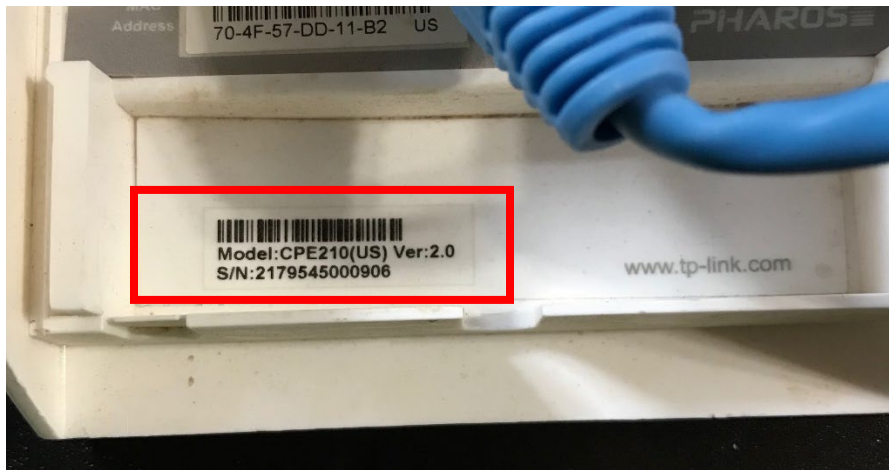


## Procedure to Update Firmware on TP-Link

(NOTE: This procedure must be performed using a Windows Laptop)

1 - Please verify the product model and the hardware version of your device from the label on the bottom of the device behind the sliding cover, to make sure you are using the correct firmware.

**Wrong firmware upgrading may damage your device and void the warranty.**



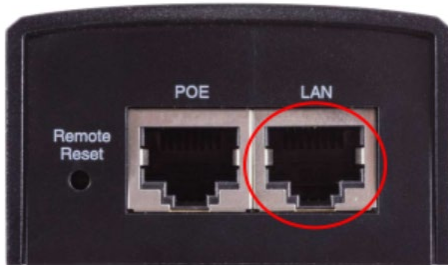
If there is no hardware version indicated on the label as seen above, it means it is the first hardware version (V1).

2 - Download the corresponding firmware and configuration files from <http://www.intelligentag.com/support/> according to the model number and hardware.

3 - Connect an Ethernet cable to the port labeled LAN0 or LAN (POE IN) on the bottom of the access point assembly. (Some TP Links only have one connection point)



4 - Connect the other end of the Ethernet cable to the POE port of the black TP Link power supply.



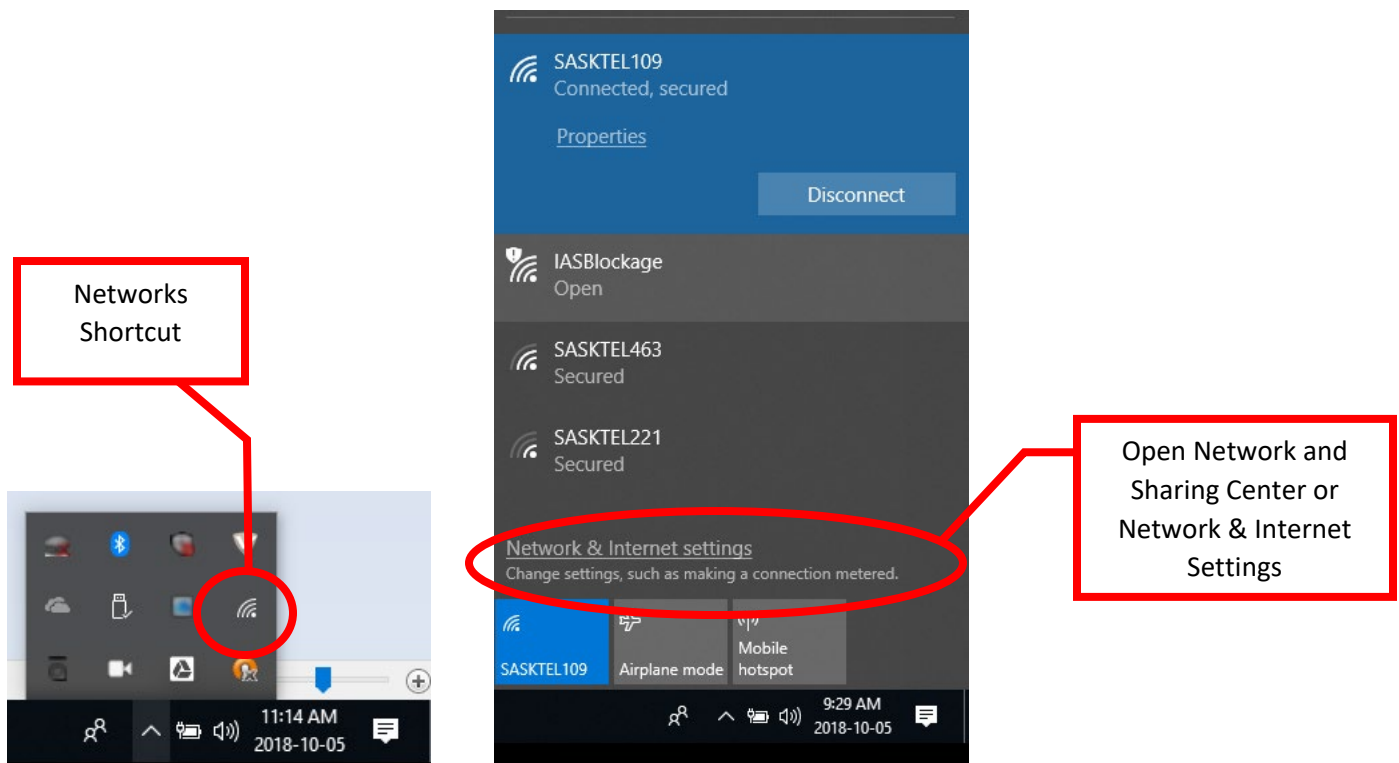
5 - Connect the access point inverter power cord to the black TP link power supply and plug it into a wall outlet.

6 - Press and hold the reset button for 8 seconds to reset the access point to factory settings.

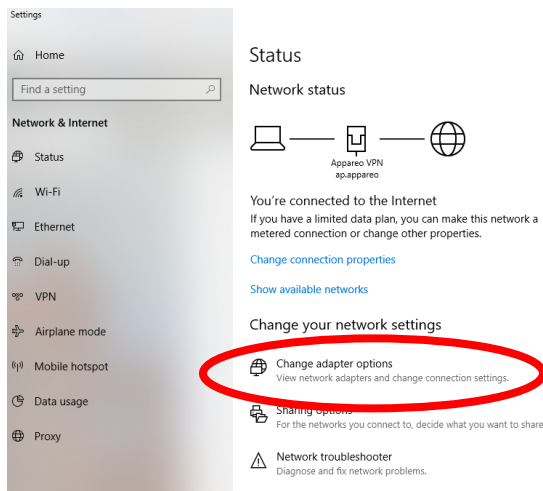
7 - Power cycle the access point (unplug and re-plug in the power cord).

8 - Plug an Ethernet cord into the LAN port on the black TP link power supply and plug the other end into the Ethernet port on a laptop.

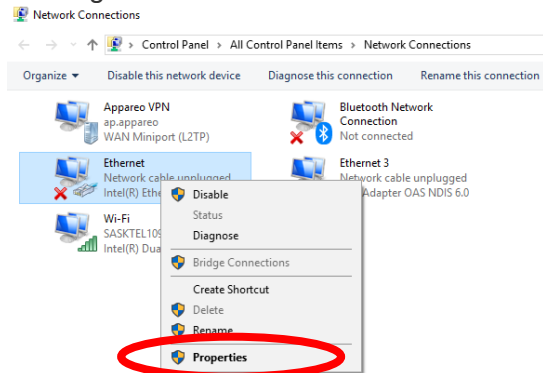
9 - Click the networks shortcut on the taskbar and click Open Network and Sharing Center or Network & Internet settings.



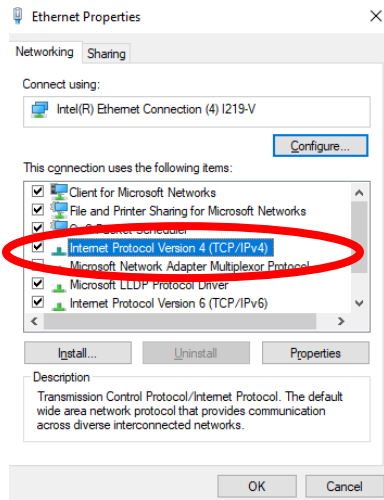
10 - Click Change adapter settings.



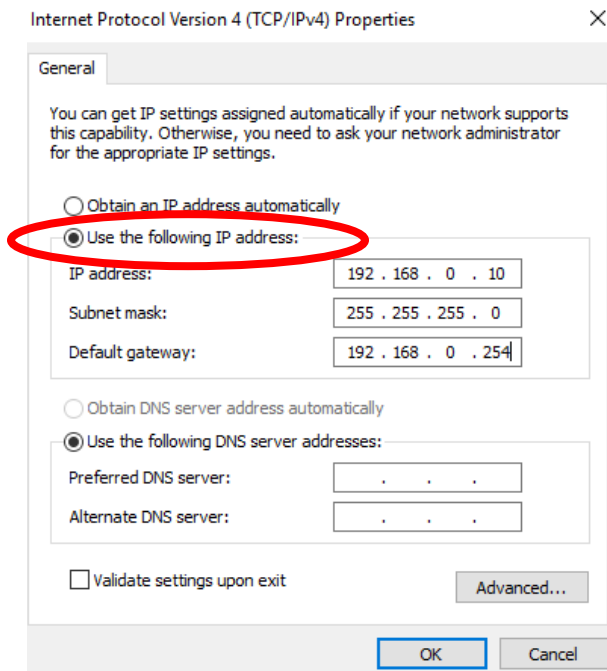
11 - Right click on the Local Area Connection, and then click Properties.



12 - Double-click Internet Protocol Version 4 (TCP/IPv4).



13 - Select Use the following IP address and enter the information below.



NOTE: Make note of your current settings so that you can change them back at the end of this process.

IP Address: 192.168.0.10

Subnet Mask: 255.255.255.0



1810 NDSU Research Circle North  
Fargo, ND 58102  
Tel: 701-356-9222  
www.intelligentag.com

Default Gateway: 192.168.0.254

14 - Click OK

### Upgrade the firmware via web management page

**Step 1** - Enter <http://192.168.0.254> into the address bar of the web browser such as Chrome, Firefox.




Then log into the TP-LINK Pharos device with your Username: **admin** and Password: **admin**, Click Login.

A screenshot of the TP-Link login page. The page has a dark header with the word "Login". Below the header is the TP-Link logo. To the right of the logo are three input fields: "User Name:" with "admin" entered, "Password:" with "\*\*\*\*\*" entered, and "Language:" with a dropdown menu showing "English". Below these fields is a "TERMS OF USE" section with a text box containing legal disclaimers. At the bottom left, there is a checkbox labeled "I agree to these terms of use" which is checked. At the bottom right, there are two buttons: "Login" (highlighted with a red box) and "Clear".

You will be prompted to change the user name and password. It does not matter what you choose at this point. Both will be erased when we install the new configuration file.

### Change Password



New User Name:

New Password:

Confirm Password:

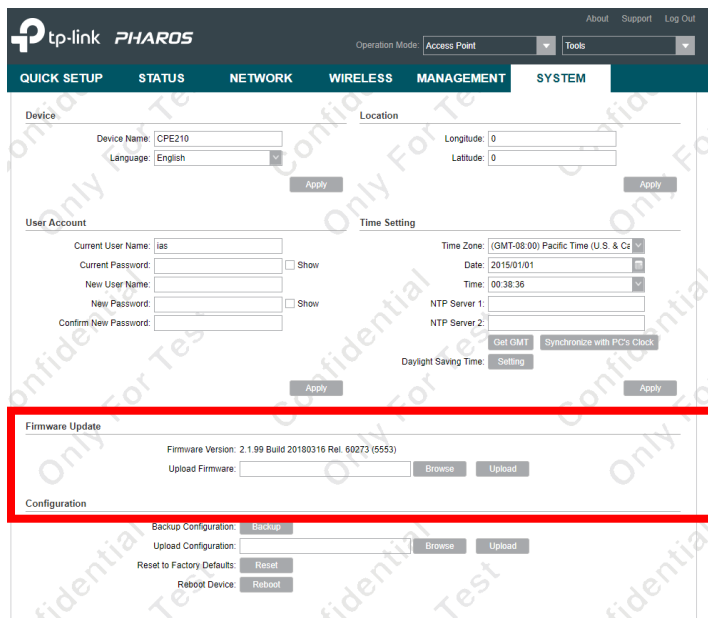
**TERMS OF USE**

It is recommended to change the device user name and password from its default settings.

**Finish** **Clear**

Click Finish

## Step 2 - Navigate to the System tab



tp-link PHAROS

Operation Mode: Access Point Tools

QUICK SETUP STATUS NETWORK WIRELESS MANAGEMENT **SYSTEM**

Device: Device Name: CPE210 Location: Longitude: 0 Latitude: 0

User Account: Current User Name: iss Time Setting: Time Zone: (GMT-08:00) Pacific Time (U.S. & C) Date: 2015/01/01 Time: 00:38:36 NTP Server 1: NTP Server 2: Daylight Saving Time: Setting

**Firmware Update**

Firmware Version: 2.1.99 Build 20180316 Rel. 60273 (5553)

Upload Firmware:  **Browse** **Upload**

Configuration: Backup Configuration: **Backup** Upload Configuration:  **Browse** **Upload** Reset to Factory Defaults: **Reset** Reboot Device: **Reboot**

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At the Firmware Update field, click the Browse button to choose the firmware you already saved in the folder.

Firmware Update

Firmware Version: 2.1.99 Build 20180316 Rel. 60273 (5553)

Upload Firmware: CPE210(UN)\_2.0-up-ver2-1-99-P1[2018...]

Browse Upload

**Step 3** - Click the Upload button. A pop-up window will provide you three options:

1. Keep: keep your current configurations after the upgrade
2. Restore: restore to factory default after the upgrade
3. Cancel: cancel the upgrade.

Click **Restore** to perform firmware upgrade.

Firmware Update

The new firmware version is 2.1.99 Build 20180316 Rel. 60273.

Do you want to keep your configurations or restore to factory defaults after the upgrade?

Keep Restore Cancel

**Step 4** - Wait for the upgrade to complete. After the upgrade, the device will reboot automatically.

Firmware Update

Rebooting

98%



**Step 5** - Log into the devices again, navigate to the Status tab, and check the Firmware Version to see whether the device has been upgraded successfully.

The screenshot shows the TP-Link PHAROS web interface. The top navigation bar includes 'QUICK SETUP', 'STATUS', 'NETWORK', 'WIRELESS', 'MANAGEMENT', and 'SYSTEM'. The 'STATUS' tab is selected. The interface is divided into several sections:

- Device Information:** Device Name: CPE210, Device Model: CPE210 v2.0 (highlighted with a red box), Firmware Version: 2.1.99 Build 20180316 Rel. 60273 (5553), System Time: 2015-01-01 00:38:12, Uptime: 0 days 00:38:14, CPU: 36%, Memory: 55%.
- Wireless Settings:** MAXstream: OFF, Channel/Frequency: 11 / 2462MHz, Channel Width: 20MHz, IEEE802.11 Mode: B/G Mixed, Max TX Rate: 54.0Mbps, Transmit Power: 27dBm, Distance: 1.0km.
- Wireless Signal Quality:** Signal Strength: N/A, Noise Strength: N/A, SNR: N/A, Transmit CQI: 100.
- Radio Status:** AP: Enable, MAC Address: 70-4F-57-DD-11-B2, SSID: IASBlockage, Security Mode: None, Connected Stations: 1, Client: Disabled, MAC Address: N/A, Security Mode: N/A, WDS: N/A, Root AP BSSID: N/A, Root AP SSID: N/A, TX Rate: N/A, RX Rate: N/A, Connection Time: N/A.
- LAN:** MAC Address: 70-4F-57-DD-11-B2, IP Address: 192.168.1.254, Subnet Mask: 255.255.255.0, Port0: Unplugged.
- WAN:** Connection Type: N/A, MAC Address: N/A, IP Address: N/A, Subnet Mask: N/A, Default Gateway: N/A, DNS Server: N/A.
- Monitor:** (Section header, no data visible).

**Step 6** – Click the System tab and click the Browse button in the configuration section.





The screenshot shows the TP-Link PHAROS web interface. At the top, there is a navigation bar with the TP-Link logo and 'PHAROS' text. Below this is a menu with tabs for 'QUICK SETUP', 'STATUS', 'NETWORK', 'WIRELESS', 'MANAGEMENT', and 'SYSTEM'. The 'SYSTEM' tab is selected. The main content area is divided into several sections: 'Device' (Device Name: CPE210, Language: English, Location: Longitude 0, Latitude 0), 'User Account' (Current User Name: ias, Current Password, New User Name, New Password, Confirm New Password), 'Time Setting' (Time Zone: (GMT-08:00) Pacific Time (U.S. & Ca), Date: 2015/01/01, Time: 00:38:36, NTP Server 1, NTP Server 2, Daylight Saving Time: Setting), 'Firmware Update' (Firmware Version: 2.1.99 Build 20180316 Rel. 60273 (5553), Upload Firmware: Browse Upload), and 'Configuration' (Backup Configuration: Backup, Upload Configuration: Browse Upload, Reset to Factory Defaults: Reset, Reboot Device: Reboot). The 'Browse' button for uploading a configuration file is highlighted with a red box.

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**Step 7** - Navigate to the configuration file that you downloaded and click OK.

**Step 8** - Click Upload. Once the update is complete, check the name of the wireless Network. If your TP Link network is normally named "IASBlockage" continue to **Step 14**. If your network is normally named "IASNetwork2" continue to **Step 9**.

**Step 9** - Connect your laptop to the "IASBlockage" network.

**Step 10** - Open a web browser and enter "192.168.1.254" in the address bar and hit enter

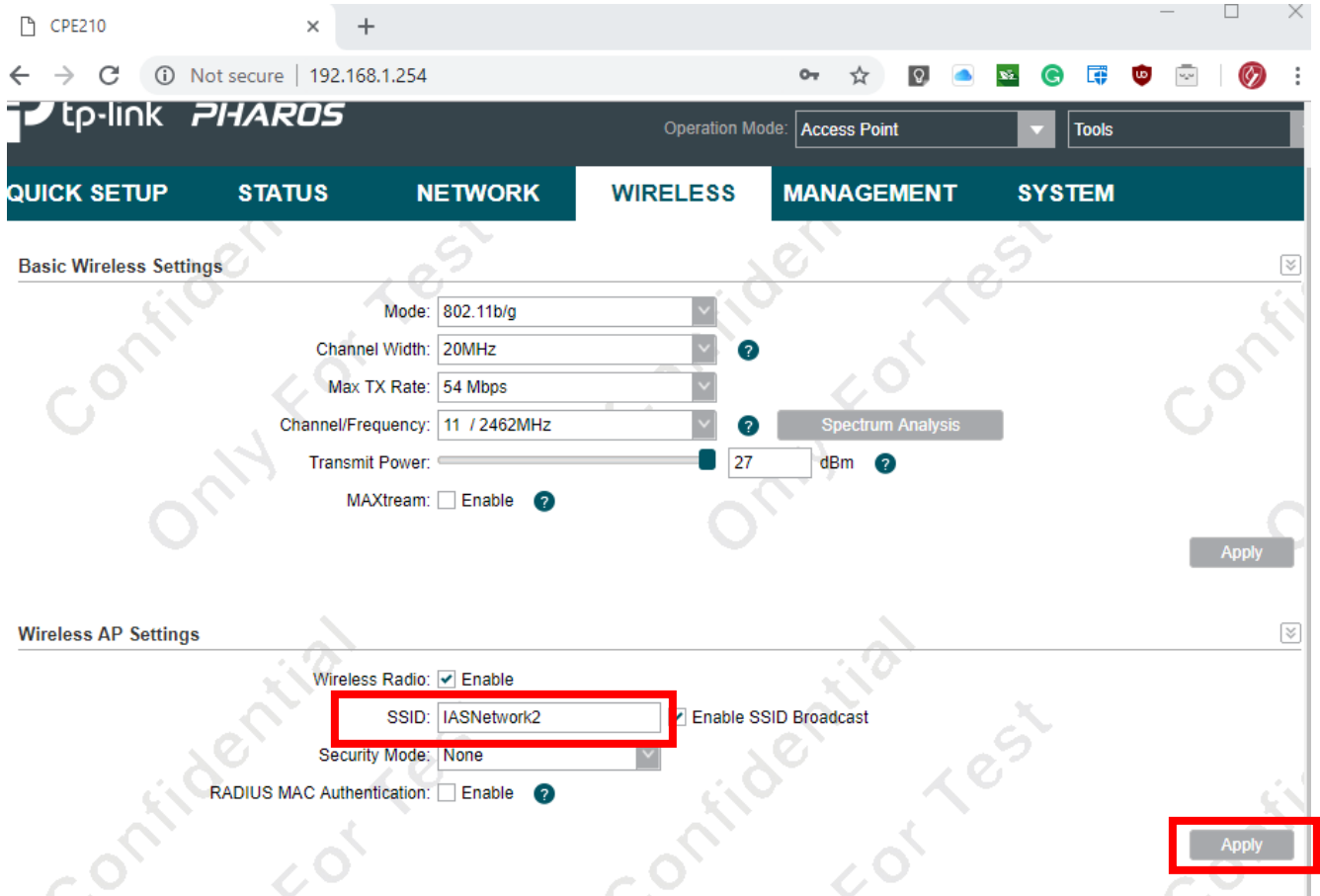
**Step 11** - Enter the username: ias and password ias2200. Click Login.



**Step 12** – Click the Wireless tab. Navigate to the SSID box under the Wireless AP settings.

The screenshot shows the TP-Link PHAROS web interface. The browser address bar shows "Not secure | 192.168.1.254". The interface has a navigation menu with tabs: QUICK SETUP, STATUS, NETWORK, WIRELESS, MANAGEMENT, and SYSTEM. The "WIRELESS" tab is selected. Under "Basic Wireless Settings", the Mode is set to 802.11b/g, Channel Width to 20MHz, Max TX Rate to 54 Mbps, and Channel/Frequency to 11 / 2462MHz. The Transmit Power is set to 27 dBm. The "Wireless AP Settings" section shows "Wireless Radio" checked, "SSID" set to "IASBlockage" (highlighted with a red box), "Enable SSID Broadcast" checked, and "Security Mode" set to "None".

**Step 13** – Change the SSID to IASNetwork2 and click the Apply button to the right. Verify that the TP link is now broadcasting “IASNetwork2”.



The screenshot shows the TP-Link PHAROS web interface. The browser address bar shows "192.168.1.254". The interface has a navigation menu with tabs: QUICK SETUP, STATUS, NETWORK, WIRELESS, MANAGEMENT, and SYSTEM. The "WIRELESS" tab is selected. Under "Basic Wireless Settings", the following options are visible: Mode: 802.11b/g, Channel Width: 20MHz, Max TX Rate: 54 Mbps, Channel/Frequency: 11 / 2462MHz, Transmit Power: 27 dBm, and MAXstream:  Enable. An "Apply" button is located to the right of these settings. Below this is the "Wireless AP Settings" section, which includes: Wireless Radio:  Enable, SSID: IASNetwork2 (highlighted with a red box), Security Mode: None, and RADIUS MAC Authentication:  Enable. An "Apply" button is also present at the bottom right of this section, also highlighted with a red box.

**Step 14** -, change your laptop network settings back to the original settings.

Connect to the IASBlockage network and re-install your TP link in the Tractor Cab.