

## 123 Fast Installation Guide LanPro's LP-1520ai Radio in Modes PtP, MP+AP (WDS+AP)

LP1520ai\_M123\_ENC01W



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This Fast Installation Guide will let you perform a fast installation of this device.

## 1 Check the box contents and physical installation as per the following list:

- LP-1520ai Radio.
- LP-PoE150 Injector.
- Power cable.

## 2 Physical connection

- Connect the Data + Power UTP Cable coming from the LP-PoE150 injector to the Watertight connector on the bottom of the LP-1520ai Radio from LanPro.
- Connect a Cat5e cable as per the 568a or 568b standard from the port marked as Data on the LP- PoE150 to the Switch. (In case you want to configure the radio in a direct manner, please use a crossed cable).

## 3 Logical Configuration

- 3.1 Please go to your Network Card (NIC) properties as shown in figure 1 and configure the IP protocol to Obtain an IP address automatically as shown in figure 2.

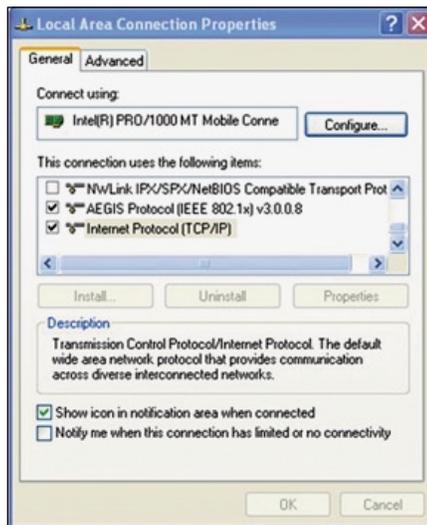


Figure 1

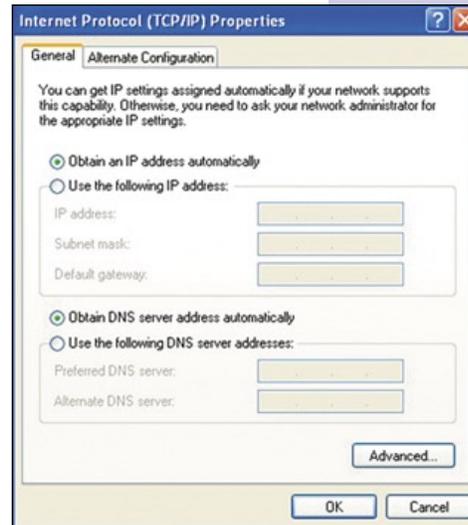


Figure 2

- 3.2 Open your preferred Browser and input the following address: 192.168.1.254 as shown in figure 3. The configuration window will pop-up but won't ask for a Username or Password.  
**Note: remember to select a Username and password for your equipment as the configuration might be accessed by any one.**



Figure 3

3.3 You should define the functionality of your Radio. The possible modes are:

- **WDS:** in case you want to create a link between two or more points (PtP, PtmP).
- **WDS+Client:** case you want to create a link between two or more points (PtP, PtmP) and accept Client type connections.
- **AP:** mode AP in which your equipment will serve to extend your wired network into a wireless way.
- **Client:** Mode in which the AP will be a client of a wireless network, or to link two wired networks, or as a client of a WLAN that is farther than a Wireless card can reach.

3.4 In the window shown in figure 4, you should disable the DHCP service and change the IP address by selecting options **TCP/IP Settings, LAN Interface**, change the IP address as per your convenience, select **DHCP** and **Disabled**. Please select **Apply Changes** in order to activate them.



Figure 4

3.5 Please go to your NIC card properties as shown in figure 5 and configure the IP protocol as shown in figure 6 so that it is in the equipment range. In this example, it should be in the segment 192.168.1.x. where x must be different to 254 as it belongs to the LP-1520ai.

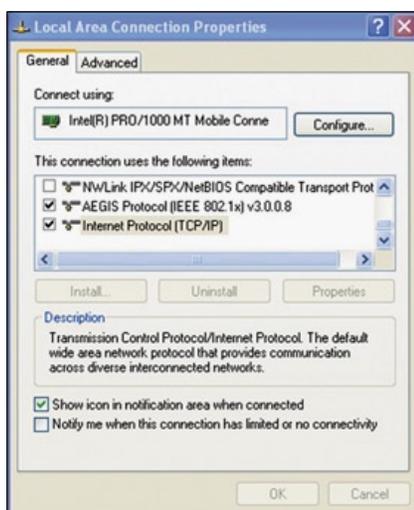


Figure 5



Figure 6

- 3.6 Please open your preferred browser and place the following address: 192.168.1.254. A configuration window will pop-up as shown in figure 7, it won't ask for a Username or password. **Note: please remember to define a username and password because anyone could Access the Configuration and change it without your permission.**



Figure 7

#### 4 Modes Configuration:

- 4.1 In figure 8, Mode: **WDS+AP**: Please select option **Basic Settings**, select **Mode WDS+AP**, and the channel number desired, it is important to mention that the same channels must be used by everybody in PtP and PtMP links. Select a name for your WLAN, this will be the one all the clients will identify as the one to connect to. Once changes are made, select **Apply Changes in order to save the changes.**

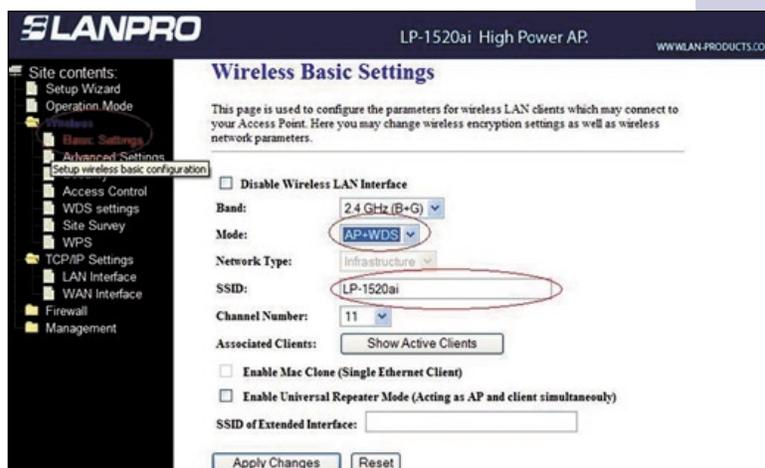


Figure 8

- 4.2 In figure 9, please select option **WDS Settings**, enable option **WDS**, add each **MAC Address** including a short **description**, which must refer to those AP's that will communicate with your WLAN. Remember to use the same channel for this purpose, then select: **Apply Changes** in order to register the changes. Please repeat this operation for each AP with which this mode will be used.

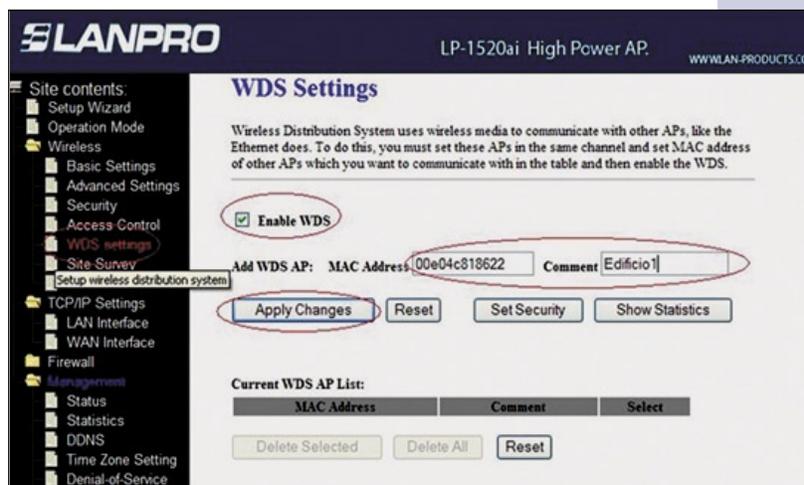


Figure 9

- 4.3 In figure 10, please select option Set Security, then configure the desired encryption option.

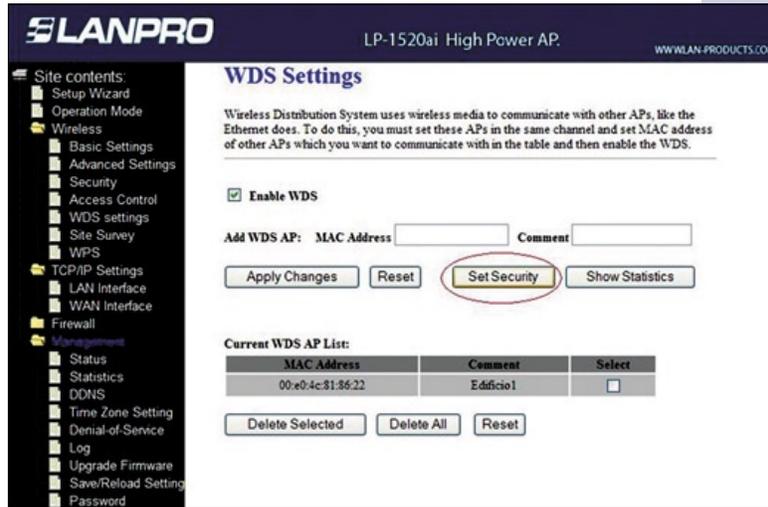


Figure 10

- 4.4 In figure 11, once the encryption is selected, and the corresponding data has been input, select Apply Changes.



Figure 11

- 4.5 You must configure the security of the clients that are to be connected to the LP-1520ai, in figure 12, please select **Wireless, Security**, choose the configuration mode from the options you desire to use, and finally select option **Apply Changes** in order to register the changes.

The screenshot shows the 'Wireless Security Setup' page for the LANPRO LP-1520ai High Power AP. The left sidebar contains a navigation menu with 'Security' selected. The main content area includes the following fields and options:

- Encryption:** WPA2 (selected)
- Use 802.1x Authentication:**
- WPA Authentication Mode:** Enterprise (RADIUS)  Personal (Pre-Shared Key)
- WPA Cipher Suite:** TKIP  AES
- WPA2 Cipher Suite:** TKIP  AES
- Pre-Shared Key Format:** Passphrase
- Pre-Shared Key:** [Masked]
- Enable Pre-Authentication:**
- Authentication RADIUS Server:** Port: 1812, IP address: [Blank], Password: [Blank]

Buttons: 'Set WEP Key', 'Apply Changes', 'Reset'. A note at the bottom states: 'Note: When encryption WEP is selected, you must set WEP key value.'

Figure 12

- 4.6 It is important to mention that the WPS functionality will be enabled automatically when the function WDS+AP is activated, this permits a very simple client setup. If this is not desired, select option **WPS as shown in figure 13**, and then select **Disable WPS**. Finally select **Apply Changes** in order to register the changes.

The screenshot shows the 'Wi-Fi Protected Setup' page for the LANPRO LP-1520ai High Power AP. The left sidebar contains a navigation menu with 'WPS' selected. The main content area includes the following fields and options:

- Disable WPS:**
- WPS Status:** Configured  UnConfigured
- Self-PIN Number:** 50243792, Regenerate PIN button
- Push Button Configuration:** Start PBC button
- Current Key Info:** Table with columns Authentication, Encryption, and Key.
- Client PIN Number:** [Blank], Start PIN button

Buttons: 'Apply Changes', 'Reset'. The table below shows the current key information:

Authentication	Encryption	Key
WPA PSK	TKIP	dsfsdfew3r2223wdewqr

Figure 13

- 4.7 Once the equipment has been configured you must establish your password. As shown in figure 14, select **Management**, **Password** and place the corresponding data. Once done, select **Apply Changes**.

The screenshot displays the LANPRO web interface for the LP-1520ai High Power AP. The left sidebar lists site contents, with 'Management' and 'Password' highlighted. The main content area is titled 'Password Setup' and contains a form with three input fields: 'User Name', 'New Password', and 'Confirmed Password'. Below the fields are two buttons: 'Apply Changes' and 'Reset'. Red circles highlight the 'Password' menu item, the three input fields, and the 'Apply Changes' button.

Figure 14

## Notes

For antenna alignment, you must have a line of sight with the other radio antenna. The aperture of this antenna is about 45 degrees in the horizontal plane. There are applications in which a distance of 6 Km has been achieved with excellent results.

This radio can be fixed to a post or a wall, taking care of positioning it in a manner that the cable enters underneath it.