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.

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

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

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).

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.

onnect using	You can get IP settings assigned automatically if your network supports
Intel(R) PR0/1000 MT Mobile Conne Configure	this capability. Otherwise, you need to ask your network administrator fo the appropriate IP settings.
his connection uses the following items:	 Obtain an IP address automatically
ST NWLink IPX/SPX/NetBIOS Compatible Transport Prot	O Use the following IP address:
AEGIS Protocol (IEEE 802.1x) v3.0.0.8	IP address:
See Internet Protocol (TCP/IP)	Subnet mask:
	Default gateway:
Install Uninstall Properties	
Description	 Obtain DNS server address automatically
Transmission Control Protocol/Internet Protocol. The default	O Use the following DNS server addresses:
wide area network protocol that provides communication across diverse interconnected networks.	Preferred DNS server:
	Alternate DNS server.
Show icon in notification area when connected	
Notify the when this connection has limited or no connectivity	Advanced
	- Artened.

Figure 1

Figure 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.

C WLAN	AP WebUI - Windows Internet Exp	plorer	
	▼ 2192.168.1.254		~
*	WLAN AP WebUI		
		Figure 3	

SLANPRO

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.

SLANPRO	LP-1520ai High Power AP.	WWWLAN-PRODUCTS.COM
 Site contents: Setup Wizard Operation Mode Wireless Advanced Settings 	LAN Interface Setup This page is used to configure the parameters for local area network which connects t LAN port of your Access Point. Here you may change the setting for IP addresss, sub mask, DHCP, etc.	o the onet
Security Security WDS settings WDS settings WPS WPS WPS LAN Interface WAN Interface Firewall Management	IP Address: Subnet Mask: Default Gateway: DHCP: DHCP: DHCP Client Range: Client Server Server Server Server Client Server Server Server Disabled Client Server	t

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.

You can get IP settings assigned this capability. Otherwise, you ne the appropriate IP settings.	f automatically if your network supports red to ask your network administrator for	
O Obtain an IP address automatically		
O Use the following IP addres	\$	
IP address:	192.168.1.1	
Subnet mask:	255 . 255 . 255 . 0	
Default gateway:	192.168.1.254	
O Obtain DNS server address	automatically	
 Use the following DNS service 	ver addresses:	
Preferred DNS server:	192.168.1.254	
Alternate DNS server:		
	Advanced	
	Verneral You can get IP settings assigned this capability. Otherwise, you ne the appropriate IP settings. Obtain an IP address auton Obtain an IP address auton Use the following IP address IP address: Subnet mask: Default gateway: Obtain DNS server address Obtain DNS server: Alternate DNS server:	

Figure 5

9.6 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.

🖉 WLAN AI	P WebUI - Windows Internet Ex	xplorer	
00-	2 192.168.1.254		*
* * [🖉 WLAN AP WebUI		
		Figure 7	
		-	

Modes Configuration:

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**.

SLANPRO	LP-1520ai High Power AP. www.an.PRODUCTS.COM
Site contents: Setup Wizard Operation Mode Content Settings Search Webs Settings Site Survey WDS settings Site Survey WDS TCP/IP Settings LAN Interface Firewall Management	WWWLAN-PRODUCTS.COM Wireless Basic Settings This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters. Disable Wireless LAN Interface Band: 24.GHz (B+G) Node: Network Type: Intrastructure SSID: (P-1520ai Channel Number: 11 Chanle Clients: Show Active Clients Enable Mac Clone (Single Ethernet Client) Enable Universal Repeater Mede (Acting as AP and client simultaneouly)
	SSID of Extended Interface: Apply Changes Reset
	Figure 8

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 cannel 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.

SLANPRO	LP-1520ai High Power AP. www.Lan-products.com
Site contents: Setup Wizard Operation Mode Wireless Basic Settings Advanced Settings Advanced Settings Security Access Control Site Survey Setup Wieless disrbution system COP/IP Settings LAN Interface WAN Interface WAN Interface Firewall Firewall	WDS Settings Wireless Distribution System uses wireless media to communicate with other APs, like the Ethermet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: The same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: The same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: The same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: The same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: The same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: The same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: The same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: The same channel and set MAC address of the same channel and the set matching the same channel a
Status Statistics DDNS Time Zone Setting Denial-of-Service	MAC Address Comment Select Delete Selected Delete All Reset

Figure 9



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



Figure 10

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.

SLANPRO		LP-1520ai High Power AP.	WWWLAN-PRODUCTS.COM
 Site contents: Setup Wizard Operation Mode West Busic Settings Advanced Settings Advanced Settings Site Survey WPS TOP/IP Settings LAN Interface Firewall Management 	Wireless Security This page allows you setup the wir could prevent any unauthorized ac	Setup eless security. Turn on WEP or WPA by using cess to your wireless network.	g Encryption Keys
	Encryption: WPA2 V Use 802.1x Authentication WPA Authentication Mode: WPA Cipher Suite: WPA2 Cipher Suite: Pre-Shared Key Format: Pre-Shared Key: Enable Pre-Authentication	Set WEP Key WEP 64bits WEP 128bits Deterprise (RADIUS) Personal (Pre-S TKIP AES TKIP AES Passphrase	hared Key)
	Authentication RADIU'S Server: Note: When encryption WEP is se	Port 1812 IP address	Password
	Apply Changes Res	et	

Figure 12

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.

SLANPRO		LP-1	520ai Hi	gh Power AP.	WWWLAN-PRODUCTS.CO
Site contents: Setup Wizard Operation Mode Basic Settings Basic Settings	Wi-Fi Protect This page allows you to feature could let your wi Access Point in a minut	change the setting t ireless client automic e without any hassle	for WPS (Wi tally syncron	-Fi Protected Setup). Using ize its setting and connect	g this to the
Advanced Settings Security Access Control WDS settings	Disable WPS WPS Status:	• ca	onfigured	UnConfigured	
Site Survey	Self-PIN Number:	5024	3792	Regenerate PIN	
TCP/IP Wi-Fi Protected Setup Firewall Management	Push Button Configura	ntion: Sta	int PBC		
management	Current Key Info:				
	Authentication	Encryption	Key		
	WPA PSK	TKIP	dssfdsfe	w3r32r23wdewqr	
	Current Key Info: Authentication WPA PSK Client PIN Number:	Encryption TKIP	Key dssfdsfe	w3r32r23wdewqr Start PIN	

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**.

SLANPRC	LP-1520ai High Power AP.	WWLAN-PRODUCTS.COM
 Site contents: Setup Waard Operation Mode Wireless Basic Settings Advanced Settings Access Centrol WDS settings Site Survey WPS TCP/IP Settings LAN Interface WAN Interface Status 	LP-1520ai High Power AP. Password Setup This page is used to set the account to access the web server of Access Point. Empty us name and password will diable the protection. User Name: New Password: Cenfirmed Password: Apply Changes Reset	WWWLAN-PRODUCTS.COM
Denial-of-Service Log Upgrade Firmware Save/Reload Setting		

Figure 14



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.