LP-N24, 123 Manual, PTP and MTP mode Installation.

LPN24_M123_ENC01W



LP-N24 123 Manual, PTP and MTP mode Installation. Т

This document's intention is to help the user setup the LP-N24 in **Point to Point**, and **Point to Multi-Point** modes. In order to perform these connections, two(2) or more LP-N24's are needed.

This manual is divided in two parts, the first: I, showing possible scenarios and configurations and the second: II, as the 123 Manual itself.

Scenarios and Configurations.

Possible configurations and scenarios are shown in the following diagrams, (See figure 1):



Figure 1

Point to Point, Multi-point Configurations, LP-N24 (WDS)

Main	Client	Main is AP
LP-N24 Bridge	LP-N24 Lazzy	No
LP-N24 Bridge	LP-N24 Bridge	No
LP-N24 Bridge	LP-N24 Repeater	No
LP-N24 Repeater	LP-N24 Lazzy	Yes
LP-N24 Repeater	LP-N24 Bridge	Yes
LP-N24 Repeater	LP-N24 Repeater	Yes

Mode	Description
Lazzy	The LP-N24 is a client WDS and AP in this mode
Bridge	The LP-N24 is a WDS Server and/or Client, Not an AP in this mode
Repeater	The LP-N24 is a WDS Server and/or Client and AP in this mode

• The figures 2 to 5 show examples of PTP and MTP possible connections with the LP-N24.



Figure 2



Figure 3



Figure 4

SLANPRO



II LP-N24, 123 Manual for Installation in modes PTP and MTP

For the configuration shown in figure 6, we use the bridge and lazzy Modalities. In these modalities, we have two (2) wireless LANS, a connection between them and a connection to Internet, please note that each network has been identified with a letter A and B.



Figure 6

II.1. Preparation.

• **II.1.1.** Please review package contents (Figure 7).





• **II.1.2.** Please turn the equipment over and take note of the Mac Addresses of both LP-N24's involved. In figure 8, you can see where to find them on the printed label.



Figure 8

II.2. "A" Network LP-N24 configuration.

• **II.2.1.** Connect power as shown in figure 9.



Figure 9

• **II.2.2.** Connect your PC to a LAN port of the LP-N24 as shown in figure 10.



Figure 10

• **II.2.3.** Connect the Internet service to the WAN port as shown in figure 11.



• **II.2.4.** Please go to your network card Properties and change the IP address as shown in figures 12 and 13.

Connect using		
intel(R) PR0/100	0 MT Mobile Conne	Configure
his connection uses th	e following items:	
W Realet EAPPi	nt (fCPAP)	
Instal Description Transmission Control wide area network pr across diverse interco	Drinnlat Protocol/Internet Proto procol that provides co meeted networks.	Properties col. The default mmunication
Show icon in notifica Notity me when this of	tion area when conne- connection has limited	oted Dr no connectivity

Figure 12

amer Protocol (TCMIP) P	ropernes
meral	
'ou can get IP settings assigned his capability. Otherwise, you ne he appropriate IP settings.	automatically if your network supports ed to ask your network administrator for
O Obtain an IP address autom	atically
Use the following IP address	•
IP address:	192 . 168 . 0 . 2
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	the second
Contain DNS server address	strutch
Use the following DNS service	er addesses
Preferred DNS server:	
Alternate DNS server:	11.11.11.1
	Advanced.
	OK Care

• **II.2.5.** Once finished, select: **Ok** and then again select: **Ok**.

• **II.2.6.** Open your preferred browser and navigate to the default address of the Router: **192.168.0.1** as shown in figure 14.

	Chttp://ww	ww.lanpro.com/ - Windows Internet Explo	pror.		
	00.	S http://192.168.0.1/	🖌 47 🗙	D Brig	P +
	E File Edit	New Favorites Tools Help			
		Fig	ure 14		
TT 2 - 4					
the passwor	ew windov d. please	v will pop-up asking for the us use the defaults for User: a	ser and admin	Connect to 19	2.168.0.1
and passwor	d: admin	i, select: OK , as shown in figu	ure 15.	R	
				P) =	COLUMN V
				The server 192.1 username and pa	68.0.1 at LanPro LP-N24 router requires a ssword.
				Warning: This ser password be serv without a secure	ver is requesting that your username and t in an insecure manner (basic authentication connection).
				User name:	🖸 admin
				Password:	•••••
					Remember my password
					Cluster of besture
			45		OK Cancel

• **II.2.8.** The configuration window will pop-up, select option: **Next**, as shown in figure 16.



Figure 16

• **II.2.9.** Select option that corresponds to your Internet Service Provider (ISP), (Most of them recommend Dynamic IP), select: **Next** as shown in figure 17.



• **II.2.10.** In order to save the changes, select: **Apply**, as shown in figure 18.



Figure 18

SLANPRO

• **II.2.11.** A Window named: **Network Status** pops-up showing the WAN connection status, it obtains the IP Address like the one shown in figure 19 (**This address is for reference purposes only**), if not, please verify the cable connection from the LP-N24's WAN port to the ADSL modem or Internet service connection; you can also try turning the ADSL Modem off and on again, then wait for 2 minutes and finally select option: **Release** then option: **Renew** in the window shown in figure 19.

Figure 19



II.2.11. In order to give a name to your wireless LAN, please select option: WLAN Settings, Basic Settings and in the field: SSID, input the name you wish for your wireless LAN. In this example, it will be: LanPro LP-N24 A; take note of the channels used, (in this example: 1 and 5) and proceed to select: Apply, as shown in figure 20.

ENATURAL CHOICE IN NE	TWOHKING	GP-N24
Syntem Status	San Ling	and the second second
Secury Wegned	El Rentio Wenters	
Advanced Settings WLAN Settings	Network Made	11b/gh meed mode
Basis Setting	100	LevioLP HOLA
Beenster Sentings	Breeser Study	Withold C/Dodge
Advanced Sortings	Chand	241284-tz (Channel I)
Will's Sertings	Provide the second	Change of the second second
Access Control	chand your	Con Dates
Consection Status	Channel Band- una	02 924
BBCF Server	Guard Jonenal	Cont Street
Virtual Berner	3001	Auto 💌
Traffic Canrol	Reverse Descripe	ODualte @Eadle
Berneter Bettings	Trans Chard	Currence Channellin III
Routing Settings	Linear Charles	Cartes a l'orena pi
System Leuis	(Anddor)	BDiate Offette
R annual		

 II.2.12. Proceed to select the security mode by selecting option: WLAN Settings, Security Settings; in: Security Mode, select the desired mode. We recommend you use: WPA2-Personal as shown in figure 21.

			STILL STILL
E NATURAL CHOICE IN	NETWORKING		LP-N24
States Barns			
Satap Witterd			
Advanced Settings	Annual Stationer		
WLAN Serlings	ND. Tebul	entra an	
Basic Sertings	Security Made	Deatle	*
Security Senlage		Deable	
Advanced Settings		WFA-Personal	
WP5 Settings	Nation Works &	Mand WFAWPA2 P	writenal
WD5 Bertings	R12,11s only dotte	open .	Diese Divekia.
Access Control	NPA-Percel-Al	Shared	petherpi are
Connection Stores.	neurostarii Tirer	Ployeed with-	and the second s
DUCP Server	and the second second		
Stread Server			
Traffic Control	[Aux] [Center]		
Basartire Southags	And		
Runting Settings			
Brotom Tests			
CONTRACTOR OF THE OWNER			

• **II.2.13.** Proceed to input the wireless LAN client password in the field named: **Pass Phrase** and select: **Apply**, as shown in figure 22.



• **II.2.14.** In this step we will stablish this equipment as a Repeater, to do this, select: **WLAN settings**, **WDS Settings** and in: **WDS Mode**, select: **Repeater Mode**, as shown in figure 23.





Figure 22

• **II.2.15.** Select the type of encryption for WDS, in this example select: **TKIP**, as shown in figure 24.



• **II.2.16.** Proceed to input the encryption phrase for WDS and the MAC address of the equipment that will be connected to it (**Network B**), then select: **Apply**, as shown in figure 25.



Figure 25

• **II.2.17.** The equipment will reboot, as shown in figure 26.



Figure 26

• **II.2.18.** Once booted, the equipment will ask for the password. If not, open the browser and access the equipment as shown in paragraphs II.2.6. and II.2.7. Proceed to review the DHCP configuration, select: **DHCP Server, DHCP Server** only on this LP-N24 and change the range if you need it, as shown in figure 27 for this example, please remember that this router will deliver IP addresseses to both networks. Then Select: **Apply**.

Figure 27



• **II.2.19.** Now proceed to change the management password by selecting option: **System Tools, Change Password**, input the new password in: **New Password**, then enter it again in: **Re-enter to Confirm** and then select: **Apply**, as shown in figure 28, remember to save it in a secure place because it will be needed again by the equipment for management.



ELANPRO

With the steps already followed, you are now through with the first part of the configuration. This equipment must remain turned on for the second part of the configuration to take place which is explained in the following paragraphs.



• **II.3.1.** Connect power as shown in figure 29.



Figure 29

• **II.3.2.** Connect to your PC to a LAN port of the LP-N24, as shown in figure 30.



Figure 30

• **II.3.3.** Open your preferred browser and input in the search field the default address: **192.168.0.1**, as shown in figure 31.



• **II.3.4.** A window will pop-up asking for the user and password, by default, user is: **admin** and the password is: **admin**; select: **OK**, as shown in figure 32.

The server 192.168.0.1 at LanPro LP-N24 router requires a username and password. Warning: This server is requesting that your username and password be serk in an insecure manner (basic authentication without a secure connection). User name: User name: Password:	Connect to 19	2.168.0.1	?
The server 192.168.0.1 at LanPro LP-N24 router requires a username and password. Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection). User name: User name: Password: December an example	1		
User name: 2 admin S Password:	The server 192.1 username and pa Warning: This se password be sen without a secure	168.0,1 at LanPro LP-N24 rout assword. rver is requesting that your u k in an insecure manner (basic connection).	er requires a iername and authentication
Password:	User name:	🖸 admin	Ŷ
	Password:	•••••	
Entemember my password		Remember my passw	ord



 II.3.5. Proceed to input the name of your WLAN by selecting option: WLAN Settings, Basic Settings and inputting in the field: SSID, the name you have selected for your WLAN; in this example: LanPro LP-N24 B, take note of the channels, in this example they are 1 and 5 and proceed by selecting: Apply, as shown in figure 33.



 II.3.6. Proceed to input the security mode for clients, by selecting option: WLAN Settings, Security Settings, in: Security Mode, select the desired mode. We recommend you use: WPA2 –Personal as shown in figure 34.

Figure 34



• **II.3.7.** Proceed to input the WLAN password in the field: **Pass Phrase** and select: **Apply**, as shown in figure 35.



Figure 35

 II.3.8. In this step, we will change the IP address of the LP-N24 of the B network. In order to do this, select: Advanced Settings, LAN Settings, change the IP address to: 192.168.0.2 (because there should not be duplicate addresses when A and B get connected), select now: Apply, as shown in figure 36.



Figure 36

• **II.3.9.** A new window will pop-up warning you to wait for a few minutes before accessing the system with the new IP address. Select: **Ok** as shown in figure 37. Please wait for about 1 minute.

Message	from webpage 🛛 🔀
?)	Wait for some minutes, if this page does not reflash, please update your PC's network config, then use the new IP to login!
	Figure 37

• **II.3.10.** Input the new IP address in your browser as shown in figure 38.





• **II.3.11.** Input your User and Password and selct : **OK**, as shown in figure 39.



Figure 39

 II.3.12. In this step, we will disable the DHCP Server for this equipment, this is so because the one that will assign the IP addresses in both networks is the LP-N24 in network A. In order to do this, select: DHCP Server, DHCP Server; disable option: Enable and select: Apply, as shown in figure 40.



Figure 40

 II.3.13. In this step we will establish the connection to thel LP-N24 Repeater (conection to Network A), in order to do this, select: WLAN settings, WDS Settings and in: WDS Mode, select: Lazzy Mode, as shown in figure 41.



• **II.3.14.** Select the Type of Encryption for WDS, remember to use the same you configured in paragraph 18, because this is the link between both networks (A and B); in this case use: **TKIP**, as shown in figure 42.



Figure 42

• **II.3.15.** Proceed to input the encription and Pass Phrase for WDS (The same for paragraph B.2.16) and then select: **Apply**, as shown in figure 43.



Figure 43

• **II.3.16.** The equipment will boot as shown in figure 44.



- Figure 44
- **II.3.17.** Once booted, the equipment will ask for a password, if not, open the browser and access the equipment as shoen in paragraphs B.3.10 and B.3.11.
- **II.3.18.** Proceed now to change the administration password by selecting option: **System Tools**, **Change Password**, input in the new password in: **New Password** and again in: **Re-enter to Confirm** and select: **Apply**, as shown in figure 45; remember to store your password in a safe place because the equipment will ask for it for administration from now-on .



• **II.3.19.** Once these steps are finished you will have configured a Point to Point network with Access to both LP-N24 for wireless connections. In order to test its operation, open a command window and send a PING to the destination router, in this example we use: 192.168.0.1, as shown in figure 30.





 If there is no answer, we recommend that you review the following points:

1. Review that both routers are in the same RF channel(review paragraphs: II.2.7 y II.3.5).

2. Review that the registered MAC address in the repeater is the one of the Lazzy (review paragraph: II.2.16).

3. Review that the name and passphrase used for ciphering of the WDS are the correct ones (review paragraphs: II.2.14,II.2.15,II.3.14 and II.3.15).

In order to verify connections between both networks, look for them and connect to each of them as shown in figure 31.



Figure 31

If there is no success in anyone of these connections, please review the following points:

• Verify that the password input in paragraphs: II.2.13 y II.3.7 is the correct one.