LP-349 123 Manual in PTP and MTP Mode.

LP349_M123_ENF01W



LP-349 123 Manual in PTP and MTP Mode.

The following Instruction Manual will guide you on how to configure the LP-349 in PTP and MTP Mode.

1

We recommend you to first draw a detailed diagram of your equipment configuration. We have developed a typical diagram shown in figure 1 where three (3) equipment will be configured in a Multi-Point configuration and that will serve as a guide for you to setup yours. We remind you that each one of the equipment has a unique MAC address which you will need in the setup.

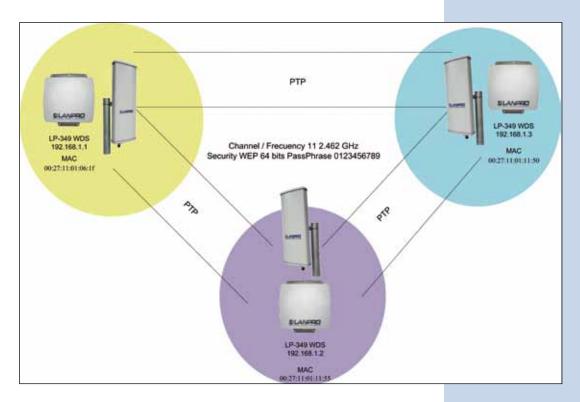


Figure 1

2

Once the Setup 123 Manual has been executed, proceed to configure it by first connecting the UTP cable that comes from the LP-349 to the **To Odu** port of the PoE Injector furnished with the radio as shown in figure 2.



Figure 2



Connect an UTP cable from the **To Ethernet** port of the PoE injector to the Switch or PC as shown in figure 3.



Figure 3

4

6

Connect electric power to the PoE injector as shown in figure 4.





5

Please go to your network card properties window and select: **Internet Protocol**, then select: **Properties**, as shown in figure 5.

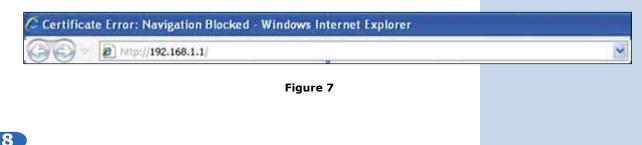
| eneral Advanced | | |
|---|---|---|
| Connect using: | | |
| Intel(R) PR0/100 | 0 MT Mobile Conne | Configure |
| This connection uses the | e following items: | |
| S** NWLink NetBI | Contractor and a second state of the | ^ |
| NWLink IPX/S | and an international statements of the second | ible Transport Prot |
| M Tintemet Protoco | ol (TCP/IP) | ~ |
| < | | > |
| Instal | Uninstal | Properties |
| Description | | |
| Transmission Control I wide area network pro across diverse interco | stocol that provides o | |
| | | ected |
| Show icon in notifical | tion atea when conn | a state of the second |
| Show icon in notificat | | for no connectivity |
| | | f or no connectivity |

In the window shown in figure 6, select: **Use the following IP address** and input an IP address in the range of IP set by default of the LP-349. In this example, we have selected address: 192.168.1.201, the LP-349 has a default address of 192.168.1.1, input 255,255,255,0 in: **Subnet Mask**, in: **Default gateway** input the destination router address, in: **Preferred DNS Server** you must input the **DNS** address of your service provider or the IP address of your destination router, the one that provides the Internet Service, this is will route any corresponding queries to the router of the destination network.

| Lucal Area Connection Properties | Internet Protocol (TCP/IP) F | Properties |
|--|--|---|
| leneral Advanced | General | |
| Connect using ImplicitedRi/PRO/1000 MIT Mobile Conne Cont This connection uses the following items: | this capability. Othermine, you no the appropriate IP sattings. | d automatically if your network supports end to ask your network administrator for |
| V" Notes Netlos | Obtain an IP address autor O Use the following IP address | 162.08 |
| Im Multike IPO/SPK-MeetBIOS Compatible Transp Im Transp Im Transp Im Transp Imma Imma | IP addeess: Subret mark: Default gateway: | 192.168.1.201 295.295.295.0 192.168.1.1 |
| Description Transmission Control Protocol/Internet Protocol. The d | Chron 2005 serves address | |
| Show icon in notification area when connected Thothy me when this convection has limited | Preferred DNS server: Alternate DNS server: | 192 . 168 . 1 . 1 |
| 2491 - 17 | | Advanced. |
| () | 1 | DK. Caro |

Figure 5

Please open your preferred browser and input the default address: 192.168.1.1, please see figure 7.



In the certificate validation window shown in figure 7, please accept by selecting: **Continue to this website (not recommended)**.

| 90. | http://192.168.1.1/ | 👻 😚 🗙 📴 ling |
|-----------|--|---|
| Favorites | Certificate Error: Navigation Blocked | 0 • 0 · 0 |
| 8 | There is a problem with this website's security certifi | cate. |
| | The security certificate presented by this website was not issued by The security certificate presented by this website was issued for a di | 사업 것 같은 것을 것 같아요. 그는 것에 집에 가장 것 것 것 같은 것 같아요. 집에 집에 가지? |
| | Security certificate problems may indicate an attempt to fool you or server. | intercept any data you send to the |
| | We recommend that you close this webpage and do not conti | nue to this website. |
| | Ø Click here to dose this webpage. | |
| < | Continue to this website (not recommended). | |
| | More information | |

Figure 8

9

In the window shown in figure 9, input the word **admin** in: **Name** and the word: **password** in: **Password** and then select: **Login now**.

| | 802.11g 54Mbps |
|----------|-------------------------|
| Name | High Speed Access Point |
| Password | •••••• |

In the window shown in figure 10, in the menu: **Wireless Setup**, proceed to select: **Basic Settings**, in: **Operation Mode**, select: **Wireless Bridge** and select: **Apply**, remember to verify the operating frequency of all of the equipment set.

| a Firewall Settings a Virtual Server a Lood Balence Wireless Setup » Base: Settings | | |
|---|---|--|
| #HTTP Redirect | | |
| RADUS Sattings | | (and the second s |
| #IP Settings | | Appy Carce |
| a Statiatica System Betup aliant: Settings | Station Mode Flow Control Costol to AP Upliek Tossif Livet (1 1987) | Excess Creases |
| h Connectors | Dubud Power | M |
| Status | Data Male | Best . |
| 802.11g G4Mbps Tyl Towel Aliest Part (= Lopost) | Wireless LAN Settings Operating Name Winness Block Channel (Fragane) | Autority The C |
| 802 110 | Wireless LAN | |

Figure 10

11)

In the window shown in figure 11, in the menu: **Wireless setup**, proceed to select: **WDS Settings**, input in: **Remote Mac Address** the MAC addresses of the destination equipment shown in figure 1. It is important to input the MAC addresses in a correct way because any error will impede the communication between them. Once finished, select: **Apply**.

| [= Logout] | · Input Remote AP MAC Address Barunity |
|---|--|
| Planta a | Local MAC Address [00 27 11 01 06 17 |
| Status | Remote MAC Address 1 420 27 11 01 11 12 |
| a Connections | Uptink Speed Limit 1 (1-1587) 1497 × 64kbps = 105.437585pp |
| a Statistics | |
| a stansoca | Hamote MAC Address 2 (05 27 11 01 11 50 |
| System Setup | Uptinit Speed Limit 2 (1-1687) 1457 + 64X3ps + 105.437583bps |
| Basic Settings | Remite SAC Address 3 |
| #IP Settings | Apres Speed Line 3 (1-1587) 1637 + 54kbps + 105.437588ps |
| # RADIUS Settings | Remote MAC Address 4 |
| a HTTP Redirect | Uptink Speed Limit 4 (1-1587) 1467 + 54kbps + 105.437588pps |
| a Firewall Settings | Rends MAC Address t |
| Virtual Server | Uplink Speed Limit 5 (1-1567) 1407 + 64kbps + 105,437548bps |
| s Loed Balance | Remote UAC Address 6 |
| Wireless Setup | Upper Speed Limit 5 (1-1587) 1487 + 64Xbps + 105,437588ps |
| n Basic Settings | Remote MAC Assess 7 |
| a VAP/VLAN Settings | and an |
| a Access Control | Uplink Speed Limit 7 (1-1687) 1457 + 64kbps - 105.437588pps |
| WDS Settings | Remote MAC Address 8 |
| and the state of the | Uplinit Speed Limit 8 (1-1587) 1687 × 54X3ps + 195.437545ps |
| » Advanced Settings | Smart WDS |
| Tools | WDS Bervice Group ID |
| » Site Survey | NO. Remote AP MAC Address |
| n Link Test | |
| Management | (Apply) Cancel |

Figure 11

12

In the window shown in figure 12, you can establish the security of the WDS connections. To do this, in the menu:**Wireless Setup**, select: **VAP/VLAN Settings**, select: **wds_profile** and then select: **Edit**.

| Status | 100000000000000000000000000000000000000 | | | | |
|---|---|--|--|------------------|-------|
| a latermation | | | | | |
| a Contecture | the second second second second | ins for Youx, Stations Adapter, WDS and loss | The Distribution of the New York, Street, Stre | | |
| + Materica | | Froffis Name | LHD | Security | Entre |
| a la companya de la c | | of Pollet | There are a second s | Date Solars | |
| System Setup | 100000000 | AP_POINT | (feature) | Taxes Bystern | |
| · Besk Settings | 11000134 | AF_Protect | Statistic . | Coren Bylateria | |
| a IP Settings | 10000034 | of Postal | This area | Career Bustments | |
| BACKUS Settings | 10000004 | M_Foliet | (COMPANY) | Dave Spenner . | |
| # HTTP Redroct | 11001154 | W.fullet | TOWNER. | Oper System | |
| a fermal Settings | | W.Futut | Townes | Dave Bidmen | |
| a Virtual Server | 24 | # Point | Western | Carer Business | |
| a Load Balance | 1 I I I I I I I I I I I I I I I I I I I | en prote | Western | Dates Hysilam | |
| Wireless Setup | 6 | add, profes | | | |
| a Basic Settings | A DECEMBER | adardanikang produc | altern 1 | | 1 |
| > VAPISAN Settings | | | East 1 | | |
| a Access Control | 1 | | ALC: NO | | |

SLANPRO

13

In this example, the keys that will be used will be generated and the encryption mode will be established. In order to do this, in the window shown in figure 13, in: **Data Encryption**, select: **WEP 64 Bits**, and input a passphrase and select: **Generate Keys**. The keys will then be generated in the LP-349. Once done, we proceed to select Key number 1 and enable them by selecting: **Enable** and then: **Apply**.

| Status | Security Profile for | r WDS Configuration |
|----------------------------------|-------------------------|---------------------|
| a Information | | |
| # Connections | Network Authentications | Caret System (10) |
| a Statistice | Data Encryption | 64 bits WEP |
| System Setup | Paraterna Rizzkietes | Jenarata Keya |
| Basic Settings | Nat () LINERACIAF | 17-10 |
| IP Settings | Ter 2 O SATECRATA | |
| RADIUS Settings | Kara C CIDINIZIER | |
| HTTP Redrect | Intel SPIELIDIE | |
| Firewall Settings | And Contractory | |
| Writiant Server | | Enable C Devates |
| · Load Balance | | |
| Wireless Setup | | Back Appy Cancel |
| a VAPVLAN Settings | | |
| » Accese Control | | |
| a WDS Settings | | |

Figure 13

14

In this case , a message shown in figure 14 will be prompted indicating that the keys apply to all the security profiles, then select: \mathbf{Ok} .

| Message | t from webpage | × |
|---------|---|---|
| Z) | NOTE: All the profiles share the same set of keys(key1-key4), except the default key inderespective profiles. | |

Figure 14

15

As shown in figure 1, we will proceed to connect the second LP-349 by repeating steps 7 to 14 of this manual, and taking in account the MAC addresses shown in figure 1. Remember to input the MAC addresses of all the equipment that will be communicated, additionally, you will have to change the IP Address as per the figure 1 diagram. In order to do this, please refer to figure 15, in the menu: **System Setup**, select: **IP Settings**, change the IP and select: **Apply**. The equipment will reboot and in order to access it again you will have to use this new IP. Please do this before establishing the communication between them.

Figure 15



16

We will now proceed to connect the **third** (3) LP-349 by repeating steps 7 to 14 of this manual, and taking in mind the **MAC Addresses** shown in figure 1. Remember to input the **MAC addresses** of the equipment you wish to communicate to. Additionally, you must change the IP address as per the diagram of figure 1. In order to do this, in the same window shown in figure 15, in the menu: **System Setup**, select: **IP Settings**, change the IP of the third one and select: **Apply**, the equipment will reboot and in order to be able to acces it you will have to use this new IP, do this before establishing communication between them.

Wait for 30 seconds and verify the connectivity of the equipment, you can do this by:



Sending a PIN to any of the destination equipmen involved, please see figure 17a.

| Command Prompt - ping 192.168.1.1 -t | - 0 |
|---|-----|
| C:>>ping 192.168.1.1 -t | |
| Pinging 192.168.1.1 with 32 hytes of data: | |
| Neply from 192.168.1.1: bytes=32 time=2ns TTL-255 Neply from 192.168.1.1: bytes=32 time=1ns TTL-255 Neply from 192.168.1.1: bytes=32 time=1ns TTL-255 Neply from 192.168.1.1: bytes=32 time=1ns TTL-255 Neply from 192.168.1.1: bytes=32 time=2ns TTL-255 Neply from 192.168.1.1: bytes=32 time=1ns TTL-255 Neply | |

Enter in the LP-349 and in the window shown in figure 17b, verify the option: **Connections** that the LP-349 are b connected.

| connected. | | | | | | |
|--|---|---|---|---|---|--|
| | Status Co | onnectio | ons | | | |
| | a Connections | Bridge 10 | BAC Address | P Address | RS SI (dDm) | Stature |
| | a-Statistics | 1 | 00:27:11:01:11:58 | 192.168.1.1 | -18 | ACTIVE |
| | System Setup | 2 | 00:27:11:01:11:50 | 102.168.1.3 | -18 | ACTIVE |
| Figure 17 b | Basic Settings | | | Retesh | | |
| ligute 17 b | | | | | | |
| In the window shown in figure : Test and verify the status of the o | | Status - Mormation - Connections - Connections - Suspence Setup - Inservice - Suspence Setup - Suspence Setup - Status - Viral Inserve - Monace Setup - Secons Central - Monace Setup | Link Test Learner Learner | 11 PM Non 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | in Parata in in in in in in in in in in in in in | Result Spot (and Status i Status Status |
| | sn't connect, verify t AC Addresses are on acryption Keys are co | correct. | ng: | | | |
| c That a | ll the equipment are | on the sa | me channel or f | requency. | | |

In the window shown in figure 19, proceed to change the administration password of the equipment. Even though it is not mandatory, we highly recommend that you change the administration password of your equipment, we must remind you to store it in a safe place to which you can have access in the event that you forget it. If you lose it, you must reset the equipment to factory values and lose any setup you have made. Please use for this the 123 manual on how to reset to factory values, document: **LP349_M123_ENC01W**.

In order to change the password, please select option: Change Password, located in the menu: Management as shown in the figure 19.

Figure 19

| System Setup | <u> </u> |
|---------------------|------------------------------------|
| Basic Settings | Change Password |
| P Settings | |
| RADIUS Settings | Current Password |
| # HTTP Redirect | |
| Firewall Settings | New Pasaword |
| Virtual Server | Repeat New Password |
| Load Balance | Restore Default Password O Yes ONe |
| Wireless Setup | Apply Cancel |
| a Basic Settings | |
| a VAP/VLAN Settings | |
| » Access Control | |
| NWDS Settings | |
| » Advanced Settings | |
| Tools | |
| ▶ Site Survey | 2 |
| a Link Test | |
| Management | |
| Change Password | |

20

In the window shown in figure 20, input in: **Current Password** the old password, in: **New Password**, the new password you want to use, in the field: **Repeat New Password**, do as indicated and the select: **Apply**.

| System Setup | |
|---------------------|--|
| Basic Settings | Change Password |
| IP Settings | |
| RADIUS Settings | Current Password |
| HTTP Redirect | and a second sec |
| EFirewall Settings | New Password |
| Virtual Server | Repeativew Password |
| Load Balance | Restore Default Password O Yes O No |
| Wireless Setup | Apply Cancel |
| a Basic Settings | Contract of the second se |
| a VAP/VLAN Settings | |
| a Access Control | |
| n WDS Settings | |
| a Advanced Settings | |
| Tools | |
| ⇒ Site Survey | |
| a Link Test | |
| Management | |
| Change Password | |