

RF Amplifiers 2.4 GHz, 123 Manual

LPPA24XX_M123_ENB02W



The LP-PA24XX Automatic Gain Outdoor RF Amplifier Family. 123 Manual.

1

This document is the quick installation guide for the LP-PA24XX Automatic Gain Outdoor RF Amplifier Family from LanPro whose part numbers follow:

**LP-PA2405 2.4 GHz Outdoor 0.5W RF Amplifier.
LP-PA2410 2.4 GHz Outdoor 1W RF Amplifier.
LP-PA2420 2.4 GHz Outdoor 2W RF Amplifier.
LP-PA2440 2.4 GHz Outdoor 4W RF Amplifier.**



2 The LP-PA24XX 2.4 GHz Outdoor RF Amplifier.

The LP-PA24XX adds strength to the output radio signal of your equipment in order to increase the coverage area and the range effectiveness for the Wi-Fi communications. The outdoor unit can increase wireless signal range by providing transmit gain as well as low noise receive gain of the indoor WLAN AP device.

The benefits of these signal boosters can save lots of wiring costs and result in an easy to build wireless infrastructure for home or business use.

With a solid aluminum construction these outdoor units amplify the signal of any 802.11b/g device for up to the maximum specified in paragraph 1.

*** Important warning: Input power must be lower than 20 dBm in order to prevent damage to the power amplifier).**

3 Package contents.

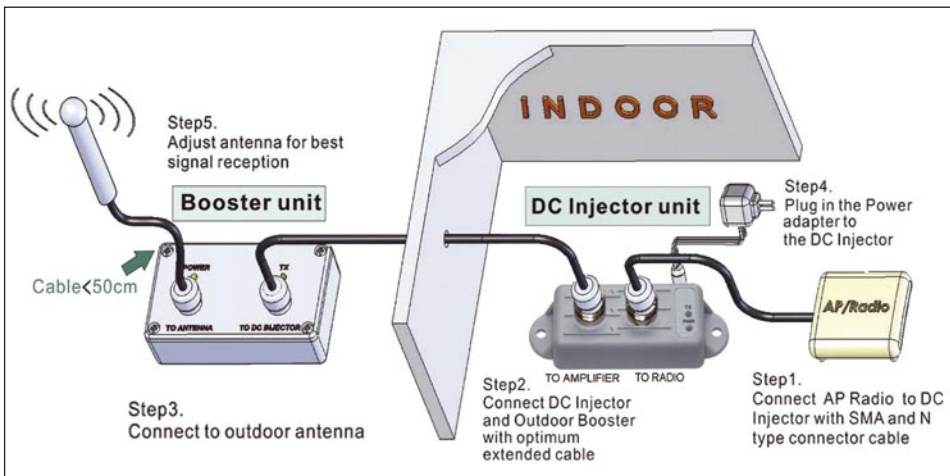
- Outdoor Wireless Amplifier Unit.
- DC Injector Unit.
- Mounting Kit.
- 30 cm male RP-SAM to male N type cable.
- Quick Installation Guide.
- Power Adaptor.



4 Specifications:

Operating Range	2400~2500 MHz
Operating Mode	Bi-directional, half-duplex, auto-switching via carrier sensing
Connector Type	N-type, female (50 Ω)
Input Power	≤ 20dBm (Warning: Input power greater than 20 dBm damages the power amplifier)
Transmit Gain	12dBm @ 0.5W, 15dBm @ 1W, 18dBm @ 2W, 24dBm @ 4W
Output Power	0.5 W (27dBm), 1W (30dBm), 2W (33dBm), 4W (36dBm)
Receiver Gain	15 dB
Noise Figure	3.5 dB
Frecuency Response	± 1 dB over operating range
Power Adaptor	7~9V /DC 110/220V /AC auto switching AC Adapter for DC Injector
Operating Temp.	-20°C a +70°C
Operating Humidity	Up to 95% relative humidity
Material	Cast Aluminum
Lightning Protection	Direct DC ground at antenna connector
DC Surge Protection	At DC input from transmission cable
LED	DC Power (Yellow), Transmit Active (Green)
Outdoor Unit (cm)	10.8cm(L) x 6.8 cm(W) x 3.0 cm(H) (0.5-1 Watt Units) 11.5cm(L) x 6.5cm(W) x 4.8cm(H) (2-4W Units)
DC Injector (cm)	10.2cm(L) x 3.6cm(W) x 2.6cm(H)
Weight	345g (Booster) / 96g (DC Injector)

5 Installation Diagram



Step 1:
Connect AP Radio to DC injector with 30 cm male RP-SAM to male N type cable.

Step 2:
Connect Dc Injector and Outdoor Booster Unit with optimum length extend cable.

Step 3:
Connect the extension cable to N type Jack of the Outdoor Booster Unit.

Step 4:
Plug in the power adapter to the DC Injector Unit.

Step 5:
Adjust antenna for best signal reception.