

# Quick Installation Guide

EAP700 v1.10

**Copyright Notice**

The contents of this publication may not be reproduced in any part or as a whole, stored, transcribed in an information retrieval system, translated into any language, or transmitted in any form or by any means, mechanical, magnetic, electronic, optical, photocopying, manual, or otherwise, without the prior written permission of 4IPNET, INC.

**Disclaimer**

4IPNET, INC. does not assume any liability arising out the application or use of any products, or software described herein. Neither does it convey any license under its parent rights not the parent rights of others. 4IPNET further reserves the right to make changes in any products described herein without notice. The publication is subject to change without notice.

**Trademarks**

4IPNET (4ipnet) is a registered trademark of 4IPNET, INC. Other trademarks mentioned in this publication are used for identification purposes only and may be properties of their respective owners.

---

## Preface

---

The 4ipnet EAP700 Wall Jack Access Point is an in-the-wall Wi-Fi IEEE 802.11b/g AP, designed to blend with any office, home interior architecture or furnishings effortlessly.

EAP700 is an easy-to-install and cost-effective solution for most of indoor wireless deployments, including hotel rooms, apartments, offices, classrooms, libraries, private homes, public kiosks, etc. When working under one of 4ipnet Controllers, the combined network turns into an intelligent building solution, a managed internet service, or a Wi-Fi hotspot network of various scales.

This Quick Installation Guide provides instructions for getting started with EAP700.

---

## Package Contents

---

1. EAP700 x 1
2. Quick Installation Guide (QIG) x 1
3. CD-ROM x 1
4. LED Sticker x 2



*It is recommended to keep the original packing material for possible future shipment when repair or maintenance is required. Any returned product should be packed in its original packaging to prevent damage during delivery.*

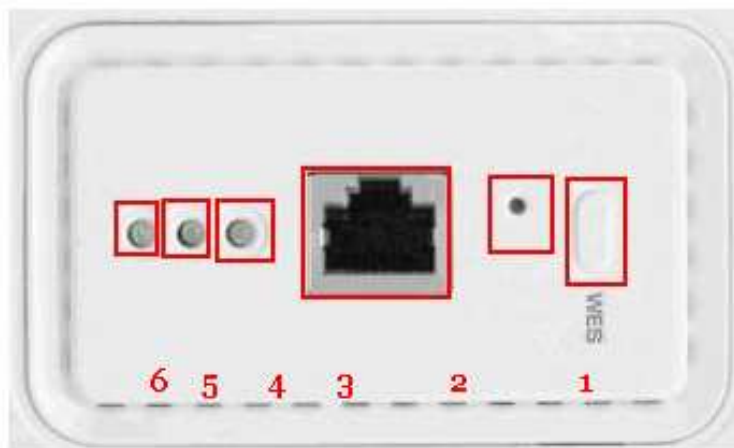
---

Optional accessories to be purchased separately:

1. AC-DC Adaptor
  2. U-shaped Wall & Ceiling Mounting kit
-

## System Overview

### Front Panel



#### ①. WES Button

- Press for 3 seconds to initiate Master AP's WDS connection.
- Press and release immediately to initiate Slave AP's WDS connection.

#### ②. RESET Button

- Pressing the button more than 3 seconds will reset the system to default settings.

#### ③. LAN Port

- The LAN port is for connection with wired network.

### LED status indication:

#### ④. LAN LED

- OFF indicates no connection; ON indicates connection; BLINKING indicates transmitting data.

#### ⑤. WLAN LED

- Green LED ON indicates system ready.

#### ⑥. Power LED

- Green LED On indicates power on; OFF indicates power off.

**In-Wall Panel****①. POWER SOCKET**

- Attach the power adapter here.

**②. PoE (LAN) Port**

- The LAN port is for connection with wired networks or PoE Switch.

## Hardware Installation

Please follow the steps mentioned below to install the hardware of EAP700:

Before the installation, assemble the following parts accordingly for later in-wall placement.

- ①. Unpack the package and remove the cover and the frame.



- ②. Lock the screw correctly to the frame.



- ③. Slide the frame from the two sides to the front until locked to the fixed point.



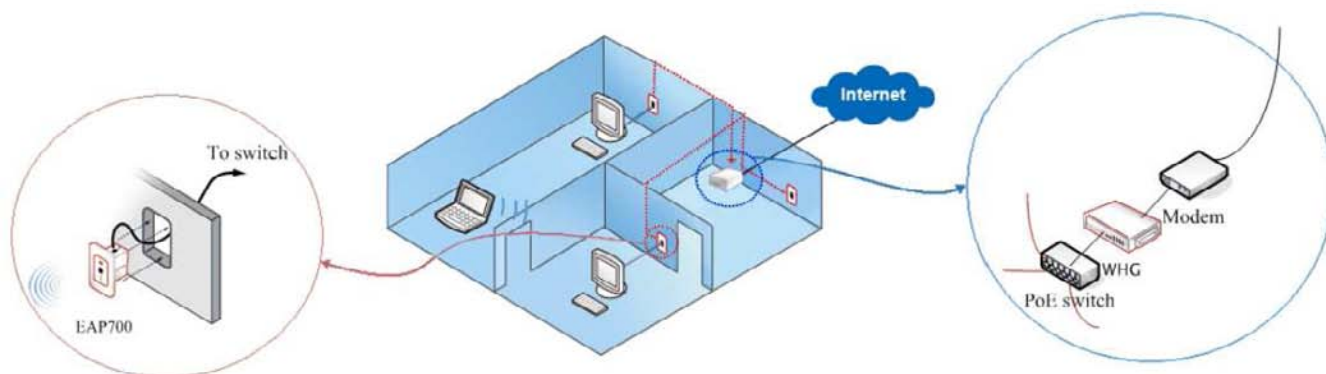
- ④. Cover it with faceplate and push the frame to the end.



- ⑤. Optional U-shaped mounting kit: Slide the frame from the two sides to the front until locked to the fixed point, and adjust the angel of set to the wall.





**Installation Steps:****1. Place the EAP700 at proper location.**

The best location for EAP700 is usually at the center of your wireless network.

**2. Connect EAP700 to your network device.**

Connect one end of the Ethernet cable to the LAN port of EAP700 and the other end of the cable to a switch, a router or a hub. EAP700 is then connected to your existing wired LAN network.

**3. There are two ways to supply power over to EAP700.**

(1) Connect the power adapter to the EAP700 power socket.

(2) EAP700 PoE (LAN) port is capable of transmitting DC currents via its PoE (LAN) port.

Connect an IEEE 802.3af-compliant PSE device, e.g. a PoE-switch, to the PoE (LAN) port of EAP700 with the Ethernet cable.

Now, the Hardware Installation is completed.

## Getting Started

4ipnet EAP700 supports web-based configuration. Upon the completion of hardware installation, EAP700 can be configured through a PC by using its web browser such as Mozilla Firefox 2.0 or Internet Explorer version 6.0 and the above.

The default values of LAN IP address and subnet mask of EAP700 are:

**IP Address:** 192.168.1.1

**Subnet Mask:** 255.255.255.0



- To access the web management interface, connect the administrator PC to the LAN port of EAP700 via an Ethernet cable. Then, set a static IP address on the same subnet mask as EAP700 in TCP/IP of your PC, such as the following example (Please note that the IP address used shall not be duplicated with the IP address of other devices within the same network.). In the Local Area Connection Properties, selecting the Internet Protocol (TCP/IP) Properties, use the following IP address as the default setting:

**IP Address:** 192.168.1.100

**Subnet Mask:** 255.255.255.0

- Launch the web browser on your PC by entering the IP address of EAP700 (**http://192.168.1.1**) at the address field, and then press **Enter**. The following Administrator Login Page will then appear. Enter “**admin**” for both the **Username** and **Password** fields, and then click **Login** to log in.

**Username:** “admin”

**Password:** “admin”



- After a successful login into EAP700, a **System Overview** page of web management interface will appear.

System Overview

Home > Status > System Overview

### System

System Name	EAP700
Firmware Version	1.10.00
Build Number	1.23-1.2398
Location	CA,US
Site	EN-A
Device Time	1999/12/31 16:44:51
System Up Time	0 days, 0:44:51

### Radio Status

MAC Address	00:1F:D4:00:20:D5
Band	802.11b+g
Channel	1
TX Power	Highest

### LAN Interface

MAC Address	00:1F:D4:00:20:D4
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Gateway	192.168.1.254

### AP Status

Profile Name	BSSID	ESSID	Security Type	Online Clients
VAP-1	00:1F:D4:00:20:...	EAP700-1	None	0

- To logout, simply click on the **Logout** button at the upper right corner of the interface to return to the Administrator Login Page.



## Common Settings

### Basic Configuration

#### Step 1. Change Administrator's Password:

The screenshot shows the configuration interface with the following elements:

- Top navigation bar: System, Wireless, Firewall, Utilities (highlighted), Status.
- Sub-navigation bar: Change Password (highlighted), Network Utilities, Config Save & Restore, System Upgrade, Reboot.
- Breadcrumb: Home > Utilities > Change Password
- Title: Change Password
- Form fields:
  - Name: admin
  - Old Password: [masked]
  - New Password: [masked] \*up to 32 characters
  - Re-enter New Password: [masked]
- Buttons: SAVE, CLEAR

- Click on the **Utilities** button, and then select the **Change Password** tab.
- Enter a new password with length up to 32 characters twice, and then click **SAVE** to save the new password.

»  
**Note:**

On each configuration page, you may

Click **SAVE** to save the changes, but you must reboot the system upon the completion of all configuration settings for the changes to take effect. When clicking **SAVE**, the following message will appear: **“Some modifications have been saved and will take effect after Reboot.”**

**Step 2. Configure Wireless Settings**

System Wireless Firewall Utilities Status

VAP Overview General VAP Config Security Repeater Advanced Access Control Site Survey

Home > Wireless > General

### General Settings

**Band**: 802.11b+802.11g

**Super G**:  Bursting  Fast Frames  Dynamic Turbo

**Short Preamble**:  Disable  Enable

**Channel**: 1

**Max Transmit Rate**: Auto

**Transmit Power**: Auto

**ACK Timeout**: 0 \*(0 - 255, 0:Auto, Unit:4 micro seconds)

SAVE CLEAR

- Click on the **Wireless** button, and then select the **General** tab.
- Determine the **Band** and **Channel** settings:  
Select your preferred **Band** and **Channel** for your wireless connection. For example, select **802.11b+802.11g** for the band and **Auto** for the channel.

### Step 3. Configure VAP (Virtual Access Point) Profile Settings

Home > Wireless > VAP Config

### VAP Configuration

Profile Name : VAP-1

VAP :  Disable  Enable

Profile Name : VAP-1

ESSID : EAP700-1

VLAN ID :  Disable  Enable  
VLAN ID :  \*( 1 - 4094 )

EAP700 Supports up to 8 virtual APs. By default, only 1 VAP is enabled.

- Configure VAP profile settings:
  - (a) Select the **VAP Config** tab to configure the settings for each VAP.
  - (b) An administrator can enable or disable specific VAP from the drop-down list box of **Profile Name**.
- Check VAP status :

After finishing the above settings, the status of enabled Virtual APs shall be reflected on the **Virtual AP Overview** page.

VAP No.	ESSID	State	Security Type	MAC ACL	Advanced Settings
1	EAP700-1	Enabled	None	Disabled	Edit
2	EAP700-2	Disabled	None	Disabled	Edit
3	EAP700-3	Disabled	None	Disabled	Edit
4	EAP700-4	Disabled	None	Disabled	Edit
5	EAP700-5	Disabled	None	Disabled	Edit
6	EAP700-6	Disabled	None	Disabled	Edit
7	EAP700-7	Disabled	None	Disabled	Edit
8	EAP700-8	Disabled	None	Disabled	Edit

**Step 4 (Advanced Optional). Choose Security Type**

- Click on the **Wireless** button.
- Select the **Security** tab to configure your preferred security type to respective VAP:  
(The following uses “VAP-1” security configuration as an example.)
  1. Choose “**WEP**” as its **Security Type**:  
While **WEP** is selected, provide the desired **Authentication, Key Length, Key Format, Key Index, and Keys**.

VAP Overview General VAP Config Security Repeater Advanced Access Control Site Survey

Home > Wireless > Security

## Security Settings

Profile Name : VAP-1

Security Type : WEP

Note! The WEP keys are global setting for all virtual APs. The key value will apply to all VAPs.

802.11 Authentication:  Open System  Shared Key  Auto

WEP Key Length :  64 bits  128 bits  152 bits

WEP Key Format :  ASCII  Hex

WEP Key Index : 1

WEP Keys :

1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>

2. Choose “**802.1X**” as its **Security Type**:

While **802.1X** authentication is selected, provide the desired **WEP Key Length** and the corresponding settings of **RADIUS Server**.



VAP Overview | General | VAP Config | **Security** | Repeater | Advanced | Access Control | Site Survey

Home > Wireless > Security

### Security Settings

Profile Name : VAP-1

Security Type : 802.1X

Dynamic WEP :  Disable  Enable

WEP Key Length :  64 bits  128 bits

Rekeying Period : 300 second(s)

Primary RADIUS Server :

Host :  \*( Domain Name / IP Address )

Authentication Port : 1812 \*

Secret Key :

Accounting Service :  Disable  Enable

Accounting Port : 1813 \*

Accounting Interim Update Interval : 60 second(s)\*

Secondary RADIUS Server :

Host:  ( Domain Name / IP Address )

Authentication Port: 1812

Secret Key:

Accounting Service:  Disable  Enable

Accounting Port: 1813

Accounting Interim Update Interval: 60 second(s)

3. Choose “WPA-PSK” as its **Security Type**:

When **WPA-PSK** is selected, provide the desired **Pre-shared Key** and **Cipher Suite**.

VAP Overview | General | VAP Config | **Security** | Repeater | Advanced | Access Control | Site Survey

Home > Wireless > Security

### Security Settings

Profile Name : VAP-1

Security Type : WPA-PSK

Cipher Suite : TKIP (WPA)

Pre-shared Key Type :  PSK(Hex)\*( 64 chars )  Passphrase\*( 8 - 63 chars )

Pre-shared Key :

Group Key Update Period: 600 second(s)

- Choose “**WPA-RADIUS**” as its **Security Type**:  
While **WPA-RADIUS** is selected, provide the **Cipher** type and the corresponding settings of **RADIUS Server**.

VAP Overview General VAP Config **Security** Repeater Advanced Access Control Site Survey

Home > Wireless > Security

### Security Settings

Profile Name : VAP-1

Security Type : WPA-RADIUS

Cipher Suite : TKIP (WPA)

Group Key Update Period : 600 second(s)

**Primary RADIUS Server :**

Host :  \*( Domain Name / IP Address )

Authentication Port : 1812 \*

Secret Key :

Accounting Service :  Disable  Enable

Accounting Port : 1813 \*

Accounting Interim Update Interval : 60 second(s) \*

**Secondary RADIUS Server :**

Host :  ( Domain Name / IP Address )

Authentication Port : 1812

Secret Key :

Accounting Service :  Disable  Enable

Accounting Port : 1813

Accounting Interim Update Interval : 60 second(s)

**Step 5. Configure WDS (Wireless Distribution System) Settings**

Home > Wireless > Repeater Config

### Repeater Settings

**Repeater Type** : WDS  WES

**WDS Profile** : RF Card A : WDS Link 1

**WDS** : Disable

**MAC Address** :

**Security type** : None

To extend its wireless coverage, EAP700 is capable of creating WDS links for connection to other WDS-capable APs (peer APs). EAP700 supports up to 4 WDS links; by default, all WDS profiles are disabled.


- Click on the **Repeater** tab.
- Select **WDS** from drop-down list of **Repeater Type**.
- Configure WDS link parameters:
  - (a) Enter **MAC Address** of Remote AP (peer AP).
  - (b) Select preferred **Security Type**.
- To configure peer AP(s):

After completing the WDS settings at this EAP700 (functioning as a “primary WDS station”), you must also configure the settings of its peer AP(s).

If you use another EAP700 as the peer AP, simply repeat the above-mentioned steps with the MAC Address of the primary WDS station for setting WDS link parameters of the peer AP(s).

**▶▶ Note:**

Besides setting up your WDS connections manually, EAP700 also provide a quick and easy way to establish WDS connection using 4ipWES (Press-n-Connect). Make sure that you have 2 EAP700 APs set to the same band, simply by pressing the WES button on both AP devices, and they will establish a wireless/WDS connection with each other without further configuration. For more detailed instructions on 4ipWES feature, please refer to the **User Manual – 4.6 Advanced Features**.

**Step 5 (CONT). Check WDS Link Status**


The screenshot shows the 4ipnet web interface. At the top, there are five main menu buttons: System, Wireless, Firewall, Utilities, and Status. The Status button is highlighted with a red border. Below these are sub-menu tabs: Overview, Clients, Repeater, and Event Log. The Repeater tab is selected. The main content area shows the breadcrumb 'Home > Status > Repeater Information' and the title 'Repeater Information'. Below this is a section titled 'WDS Link Status' with a table of data.

Item	Status	MAC Address	RSSI	TX Rate	TX Count	TX Error	Encryption
1	Enabled	1A:23:2B:45:60:70	0	54 M	64	64	None
2	Disabled		N/A	N/A	N/A	N/A	N/A
3	Disabled		N/A	N/A	N/A	N/A	N/A
4	Disabled		N/A	N/A	N/A	N/A	N/A

- Click on the **Status** button.
- Select the **Repeater** tab.
- Check the signal strength of WDS Link(s) :

Upon the completion of Step 5, there shall be **RSSI** displayed on the **WDS Link Status**.

If the **RSSI** is shown as **N/A**, check if the wiring is properly connected and please ensure the accurate execution of Step 5 as described above.

**Congratulation!**

Now, 4ipnet EAP700 is installed and configured successfully.



- *It is strongly recommended to make a backup copy of configuration settings.*
- *After EAP700's network configuration is completed, please remember to change the IP Address of your PC Connection Properties back to its original settings in order to ensure that your PC functions properly in its real network environments.*

P/N: V11020100928