User Manual
Outdoor Wireless CPE

Version: 20140909

I. Packing list:
1. CPE*1
2. POE power adapter *1
3. Network cable *1
4. Manual *1
5. "O" fixed ring*2

II. The panel layout
1. Reset button.
2. The signal strength indicator(For station and Ethernet Converter) mode only.
   Strong: all lights on.
   Good: both light 2 and 3 on.
   General: only light 3 on.
   *If the user choses to select stations and Ethernet Converter, all
   lights on. Otherwise, all lights off.
3. LAN port indicator (light on when connected with computer).
4. WAN port indicator.
5. PWR: power indicator.

III. Reset, install and power supply
1. Reset: Click "reset" on admin page or press the "Reset" button on CPE panel.
2. POE power supply, install as pic:
   Note: POE port must be connected with CPE WAN port as it is the power supply port.

IV. Device Applications Scenarios
1. Station and Ethernet Converter mode (receive wifi only, wireless + wired) as pic:

   ![Diagram 1]

   Figure 1: Primary router

   Configuration details please refer to CPE working mode A and D.

2. AP and Gateway mode (transmit wifi only, wireless + wired) as pic:

   ![Diagram 2]

   Figure 2: Primary router

   Configuration details please refer to CPE working mode B and F.

3. Repeater mode (receive and transmit wifi both, wireless + wired/wired) as pic:

   ![Diagram 3]

   Figure 3: Primary router

   Configuration details please refer to CPE working mode C and E.

V. Connect CPE and computer
1. Power on the CPE
   - Connect the CPE with power supply (see the installation pic), the PWR and WAN indicator light on when the device works(can be configured).

2. Connecting
   A. Windows XP system setting
      - Please right click "My network places" -> "properties" as pic:

   ![Diagram 4]

   - Click "Property" in the pop-up, double click "Internet Protocol version 4 (TCP/IPv4)", as pic:

   ![Diagram 5]

   - On the next pop-up, choose "Obtain an IP address automatically(D)" and "Obtain the DNS server address automatically(B)" -> click "OK", finish the IP address setting, as pic:

   ![Diagram 6]

   - Click "Local Area Connection" -> "Properties" -> double click "Internet Protocol(TCP/IP)" as pic:

   ![Diagram 7]

   - On the next pop-up, choose "Obtain an IP address automatically(D)" and "Obtain the DNS server address automatically(B)" -> click "OK", finish the IP address setting, as pic:

   ![Diagram 8]

   - Note: Here set the system "Obtain IP address automatically(D) is for default Router modes. For Bridge modes, please set IP address manually, as the following pic:

   ![Diagram 9]

   Under bridge mode, after set the working mode, you need to set the "Obtain IP address automatically(D) is for default Router modes. For Bridge modes, please set IP address manually, as the following pic:

   ![Diagram 10]

   VI. Login CPE
1. Visit http://10.10.10.254 on IE browser, input user name: admin, password: admin, click "ok" as pic:

   ![Diagram 11]

   2. Login Web Admin page as pic:

   ![Diagram 12]
Choose the SSID to be connected, click "Add profile" (as example).

Input password correctly, click "Apply", as pic:

Click "Wireless setting" -> "Profile", select the SSID has been added, click "Activate". Network will be connected automatically once device on boot, as pic:

Check the connect status from "Link status" after connected.

Configuration finished, view the Administration -> Status, if IP address obtained already, the computer can access to the internet, as pic:

B. Gateway Mode (Transmit wifi)
Click operation mode, choose "Gateway" and click "Apply".
Note: Once applied this mode, it takes effect when system restart. To login the admin page, you may connect the CPE LAN port with network cable or link the wireless signal from CPE (as the following example). Wireless SSID:CPExxxx, password: blank.

Bridge: three modes available (Not recommended for unprofessional users)

Brief Introduction
1. AP Mode (wired = wireless): For the wired network users to transfer the wired network into wireless coverage via network cable, application scenarios please refer to Figure 1.
2. Station Mode (wired = wireless): For wireless network users to transfer wireless network into wired network by connecting CPE to PC or WAN port of router. The IP address of PC or router is assigned by the device which CPE linked to because this mode pass through the root IP. Application scenarios please refer to Figure 2.
3. Repeater mode (wireless = wireless): For wireless user to receive and transmit wifi in wired or wireless form. The IP address of PC or router is assigned by the device which CPE linked to because this mode pass through the root IP. Application scenarios please refer to Figure 3.

Note:
1. Once applied operation mode change, CPE system will restart and take effect.
2. To login admin page please configure the Local Area Network IP address manually. Set the static IP address, please refer to V about the system setting.
3. Then please refer to VI to login the admin page.

D. Station Mode
Note: Configuration please refer to "Ethernet Converter" mode. Then check the connect status, if connected please set the "local network connection" to "Obtain IP address automatically".

E. Repeater Mode
Note: Configuration please refer to "Repeater" mode. Then check the connect status, if connected please set the "local network connection" or Wireless network connection to "Obtain IP address automatically".

F. AP Mode
NOTE: Login the admin page by connect the CPE WAN port and PC, configuration please refer to the "Gateway", then insert the computer cable into Router LAN port. The terminal device access the internet by linked to the wifi of CPE.

After system restart:
1. Connect the device via wireless network, right click "wireless network connection" choose "view available wireless networks", new product can be connected directly without key.
2. After connected, please login the admin page (login please refer to VI). To secure the wifi, please click "Wireless Setting" -> "Security" -> "Security Mode" -> "WPA-PSK" -> "Apply", as pic:
3. Then set the password and click "Apply", as pic:
4. Three kinds of network connection are available in this mode: STATIC (Fixed IP), DHCP (auto config) and PPPoE (ADSL). Choose one from "wireless setting" -> "WAN", as pic:
5. Configuration finished, click Administration -> "Status", if IP address obtained already, the computer can access to the internet, as pic:

C. Repeater Mode (Receive and transmit wifi both)
Click operation mode, choose "Repeater" and click "Apply". Setting as follows:
1. Login the admin page with wired network (as mode A) or wireless network (as mode B). Click "Wireless setting" -> "Root AP" -> "Scan all APs", then choose the SSID from list and input correct "wifi password" -> "Apply", as pic:
2. If setting successfully, you may see the connect status as pic:
3. Configuration finished, click Administration -> "Status", if IP address obtained already, the computer can access to the internet, as pic:

VIII. Mounting

Wall mounting
Knock two nails (come with goods) on the wall, distance 2.7cm. Fixed the nails and hang the CPE back case hole on the nails, buckle down.

Pole Holding
Unite the O ring, cross buckle from ① to ②, then fix the CPE to the pole, lock it with screw ③. The diameter of pole can be 64-74mm.

IX. FAQ
1. Cannot enter the web admin page by the CPE IP address: http://10.10.10.254/?
   a. If the CPE power indicator light is off after connected with power supply, please check the power line. If it is ok, that will be device problem, please contact us.
   b. Please check if the network cable is good, sometimes the indicator lights up doesn’t mean the cable is ok.
   c. Please run the CPE IP 10.10.10.254 by Ping tool, if it works, please check weather your browser with proxy server, if yes, close it; If the Ping tool cannot run the CPE IP, plug the power supply after unplug for 15 seconds, then run the IP by Ping tool again.
   d. Check if computer IP is correct (It should be in the same network segment with the CPE.)
   e. Please check if the Ethernet port is LAN under current mode (under Gateway mode, LAN port as WAN port), login admin page must be via wireless connectivity or Lan port.
   f. Try another browser to login again.
   g. Forget the admin page login password?
      Reset the CPE:
      a. Click the "reset" on Admin page;
      b. Long pressing the key "reset" for 5-10 seconds.
      c. The IP address conflicts when the computer connected with CPE?
         a. Please close the extra LAN DHCP server if there is any.
         b. Please confirm the default IP 10.10.10.254 is not occupied by the other computer or device if yes, please modify it. Two computers can not with same IP.
      d. Network unstable and slow?
         a. Please turn off the other wireless devices before testing the CPE.
         b. Because it is high power and sensitive, so more easily interfered by the wireless signal sources.
      e. Set the CPE bandwidth to 20MHz is recommended.
      f. Network card can’t get the IP address?
         a. Please close the DHCP and connect with static IP.
         b. Please close the network card firewall.
      g. What factors influence the wireless transmission? How to avoid it?
         a. Interference: Close the unnecessary wireless device with same 2.4GHz as CPE like the wireless router, mouse, keyboard, headphone, etc.
         b. Weather: The rainy and snowy weather may cause the signal unstable. AP works better in good weather.
      Note: CPE device is without anti-thunder equipment, please close it in thunderstorm.