

Guide for setting up Raspberry Pi with Comitup for headless Wi-Fi configuration

Required hardware :

1. Raspberry Pi Zero Wireless WH (Pre-Soldered Header)

<https://robu.in/product/raspberry-pi-zero-wireless-wh-pre-soldered-header/>

2. Standard 5V 3A Power Supply with Micro USB Plug
3. SanDisk Micro SD/SDHC 32GB Class 10 Memory Card

Steps:

1. **Download Comitup Image:** Download the Comitup Raspberry Pi OS image (Lite or full version) from the official website. (<https://davesteele.github.io/comitup/>)
2. **Flash the SD Card:** Use an imaging tool (**balenaEtcher** software) to write the image to the SD card (Prefer 32GB).
3. **Insert SD and Boot:** Insert the SD into the Raspberry Pi and power it **ON**. **SSH** is enabled by default; use **comitup** (case-sensitive) as both username and password.
4. **Access Comitup Network:** If no known Wi-Fi is detected, a **comitup-xxxx** AP will appear.

5. **Web Interface:** Connect to this AP and go to <http://comitup.local> or **10.0.0.2/24** to manage network connections.

Note: Once your Raspberry Pi boots up, wait a moment and check your Wi-Fi networks on your phone. You should see an open access point named **comitup-XXX**. Connect to it, and a web interface will automatically open. Select your Wi-Fi router from the list, enter the router password, and submit. The Raspberry Pi will try to connect to your Wi-Fi. Once connected, you can access the Pi via SSH using software like Putty, enabled by default for remote management.

6. Download Putty from <https://www.putty.org/>
7. **Network Scanner App:** Use an app like **Fing** (iOS/Android) or **Advanced IP Scanner** (<https://www.advanced-ip-scanner.com/>)(Windows) to scan your network and locate devices, including the Raspberry Pi.
8. After Getting Raspberry pi IP address, You can connect Raspberry pi via Putty software.
9. **Connect via SSH:** Once you have your Raspberry Pi's IP address, use Putty to connect over SSH.
10. **Login:** Enter the username (**comitup**) and password (**comitup**). The password won't show as you type—just type it carefully and press Enter.
11. **Access Terminal:** You're now logged in to the Raspberry Pi's terminal.
12. **Enable VNC Server:**
 - Run **sudo raspi-config**.
 - Go to **Interface Options > VNC > Enable**.
 - If using Comitup Lite, install a GUI first with **sudo apt-get install lightdm**.

13. **Set Auto Login (GUI):** In **System Options** of `raspi-config`, set the boot to auto-login to GUI.
14. **Install VNC Viewer:** Install VNC Viewer on your computer, create an account, and log in.
15. **Connect:** In VNC Viewer, enter the Raspberry Pi's IP address and log in with your Pi's default credentials.
16. **Cloud Access:** For remote access, add the Pi to VNC Cloud; free accounts allow up to 5 systems.