

Proxy Chaining Router PCR-W Series

Quick Start Guide & User Manual (v1.0)

1. Package Contents

Please check that all accessories are intact after unboxing:

Item	Quantity	Description
PCR-W Wireless Router Host	1 Unit	PCR-W10 / PCR-W40 Model
Power Adapter	1 Pcs	12V DC Industrial Grade
External Antennas	2 Pcs	High-Gain Dual-Band Antennas

2. Default Wi-Fi Credentials

The universal factory Wi-Fi password for all broadcast SSIDs is: `admin123`

3. Hardware Connection & Getting Started

3.1 Preparation

1. Screw both external high-gain antennas tightly onto the router's antenna connectors.
2. Connect the power adapter and plug it into a power outlet.
3. Download and install the **ALTool** configuration utility on your Windows PC.

3.2 Connection Topology

Method 1: Wired LAN Connection (Recommended)

Internet / Modem —WAN Port— [PCR-W Router] —LAN Port— Windows PC (ALTool)

1. Connect your Internet modem or upstream switch to the PCR-W **WAN** port.
2. Connect your PC network card to the PCR-W **LAN** port using an Ethernet cable.
3. Launch **ALTool.exe** to begin setup.

Method 2: Wireless Setup Connection

Internet / Modem —WAN Port— [PCR-W Router] —Wi-Fi (AL0S-Set-1)— PC / Laptop

1. Connect WAN port to the upstream Internet source.

2. Connect your PC to the management Wi-Fi SSID: `ALOS-Set-1`.
3. Enter default password: `admin123`.
4. Launch **ALTool.exe**.

4. Configuring Router with ALTool

4.1 Login

Open ALTool and click the central **"Login"** button. The status bar will confirm **"Logged in"**.

4.2 Wi-Fi & Multi-SSID Settings

Click **"Wi-Fi Setting"** on the left menu. ALTool allows assigning unique SSIDs and hardware MAC addresses:

- **Mode 1 (Random Brand Generation):** Generates authentic enterprise brand router SSIDs and real vendor OUI MAC addresses from a built-in database.
- **Mode 2 (Sequential Generation):** Generates structured SSIDs with sequential numbering for large device matrices.
- **Mode 3 (Custom Prefix):** Enter your desired prefix (e.g. `SHOP-US-`), select the number of SSIDs to broadcast (up to 40 for PCR-W40), and click **Make**.

4.3 Chaining Proxy Architecture (Relay + Landing)

PCR-W features two-tier proxy chaining for latency optimization and origin IP protection:

- **Relay Node (Transit Acceleration):** Fast, low-latency intermediate node to accelerate tunnel traffic.
- **Landing Node (Clean Egress IP):** Dedicated clean residential or datacenter static IP that terminal devices present to foreign platforms.

In **ALOS Proxy** settings, select the target sub-router, configure both Relay and Landing parameters, and click **Save and Apply**.

4.4 CloudLink Integration

CloudLink automatically converts Alibaba Cloud, Tencent Cloud, AWS, or self-hosted Linux VPS instances into dedicated proxy exits with a single click. Enter VPS Host IP, SSH Port (22), Username (root), and Password, then click **Bind**.

Firewall Port Requirements for CloudLink VPS:

Ensure your VPS firewall allows SSH (Port 22) and UDP/TCP ports `23585`, `26516`, and `32411`.

4.5 Access Rules & Zero-Traffic Port Forwarding

Access rules allow administrators to manage terminal devices via RDP/SSH across isolated subnets without consuming any proxy traffic. RDP connections bypass the proxy tunnel and stay strictly on the local switch fabric.

5. Troubleshooting & FAQ

- **Cannot connect to router:** Verify cabling, confirm LAN IP is in range, check Wi-Fi password `admin123` , or reboot the host.
- **Proxy verification timeout:** Ensure credentials have no trailing whitespace, verify upstream DNS, and confirm VPS firewall allows traffic.
- **RF Interference:** Keep ALNETS routers at least 3 meters apart from other wireless APs, tune 5GHz channels to 36/44/149/157.

6. Official Technical Support

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