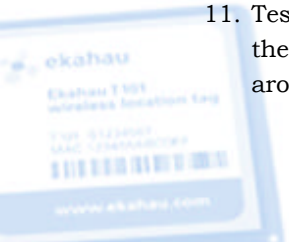
ekahau
Innovation Through Location

Ekahau T101 Developer Kit – Quick Setup Guide

Please refer to the User Guides for detailed instructions.

1. Install the Positioning Engine (EPE) 3.0 software completely on a Windows XP/2000 **laptop** PC equipped with a **supported** and **working** Wi-Fi adapter (http://www.ekahau.com/devices).
2. The laptop must provide a standard 9-pin serial connector for the tag's configuration cable. If your laptop has USB connectors only, purchase an external USB–serial cable (9-pin) adapter.
3. Open Ekahau Manager. If you cannot see the blue signal strength bars by selecting **View > Signal Strengths**, make sure you are using a supported Wi-Fi adapter and driver.
4. Make sure that the Positioning Engine status light in the lower right corner is green (connected). If not, manually start the **Ekahau Positioning Engine** Windows service.
5. Select **File > New Map...** to open your floor-plan map image. Supported formats are PNG, JPG, and BMP.
6. Use the **measure tool** () to define the correct map scale (how many map pixels equal one real-world meter or foot).
7. Draw the tracking rails on the map by using the **rail tool** (). You should cover all the valid paths where the EPE later locates the tags and other client devices.
8. Take the laptop and walk around the area on the rails. Stop at least every 15 ft (5 meters) to record a 'sample point' by clicking your current rail location with the **calibration tool** ().
9. Select **File > Save to Positioning Engine** to save the positioning model in the Positioning Engine server. The Engine is now ready to start locating T101 tags, PDAs, and laptops.
10. If you want to locate PDAs or laptops, install and run **Ekahau Client** software on the devices (with a supported Wi-Fi adapter).
11. Test the positioning model by clicking the Ekahau logo () in the upper right corner to locate your laptop on the map. Walk around while comparing the estimate to your correct location.



12. In case of >5m (15ft) average error, record samples every 3m (10 ft) or add extra 'dummy' Access Points by only powering them up. At least 3-5 strong AP signals are recommended at each location.

13. Install the included serial cable between the tag and your laptop and open a terminal program, such as Windows HyperTerminal. Connect using a COM port, typically COM1 or COM2.

14. The acceptable communication parameters are 9600,8,N,1, meaning 9600 bits/s, 8 data bits, no parity bit, and 1 stop bit. **Flow Control must be set to "None".**

15. Switch on the tag by keeping the call / on-off button **pressed down for 5 seconds**. Release when green LED appears. Press Enter if the CLI prompt does not appear in 10 seconds. If the battery is empty, connect power cable and try again.

16. Configure at least **SSID** (network name) and **Positioning Engine IP address**. If you don't have a DHCP service, or use WEP encryption, also configure **tag's IP address** and **WEP** key:

    wlan ssid MyNetworkName<Enter>
    engine ip 192.168.1.1<Enter>
    wlan wep "HaRdeR2HackeR"<Enter> (if WEP is in use)
    name Robert<Enter> (friendly name is optional)
    save<Enter>
    (Type **config** or **help** for all configuration parameters or help.)

17. After configuring the tags, click Ekahau Manager's **Devices Tab** to make sure the tag IPs or names appear on the device list. This verifies that your network and the tags are properly configured.

18. To test tracking in Ekahau Manager, double-click a suitable map image in the Browser View to display it, and click each device's **tracking** checkbox on the Devices Tab. You should see the T101 tag locations on the map screen.

19. Refer to EPE Developer Guide on how to read location information using Ekahau Java SDK or YAX™ protocol.

20. With problems or questions, please send your question or detailed error description to **support@ekahau.com**.