



SimpliLinux

How to Use Wi-Fi Connection

Sharing Internet with SMX-RNS

07/2020
man-en-wifi-phone-tethering.docx
Version 1.1

Legal Notices

Warning Notice System

This document contains alerts and information indications for the safety of you and your devices. The symbols and meanings used to draw your attention to these notifications are listed below.



Danger: Indicates that death or severe personal injury will result if proper precautions are not taken.



Warning: Indicates that death or severe personal injury may result if proper precautions are not taken.



Info: Indicates advice or **information**.

Qualified Personnel

It is assumed that what is described in this document will be applied by qualified personnel for the specific task.

Disclaimer

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency.

The information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Change Log

Version	Date	Description
V1.0	07/2020	Draft
V1.1	07/2020	Typos

Preface

Purpose of the Document

The document contains information about the following topics;

- ◆ Giving Internet Access from Android Phone to SMX-RNS with WiFi
- ◆ Giving Internet Access from iOS Phone to SMX-RNS with WiFi
- ◆ Adjusting Wireless Settings for SMX-RNS02 with Physical Connection
- ◆ Adjusting Wireless settings for SMX-RNS02 with Wifi Connection

Required Level of Knowledge

In order to fully understand and apply this document, it is necessary to have knowledge of IT, Automation and Electricity.

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1. Required Hardware and Software

The software and hardware to be used in this guide is listed below.

Hardware

- ◆ 1 x SMX-RNS02 Module
- ◆ 1 x SMX-N1559 Wi-Fi Module
- ◆ 1 x Ethernet Cable with min. 1 meter length (Optional)
- ◆ 1 x Android or iOS Mobile Phone
- ◆ User PC

Software

- ◆ Windows 7 or Windows 10 (32 Bit or 64 Bit) Operating System
- ◆ Web Browser (preferably Google Chrome)

2. Preparing Hardware

2.1. Electrical Connection of SMX-RNS02 Module

The SMX-RNS02 module has one terminal group. The terminal group is called X1. The X1 terminal group has 3 terminals. They are in order as follows;

X1		
+	-	GND

Connect your power supply's output to the appropriate terminals (+), (-) and GND.



There are 2 USB connections on the SMX-RNS02. The USB connection requires the (-) and GND terminals to be short circuit as a design concept. For this reason, GND and (-) terminals on SMX-RNS02 are shorted.

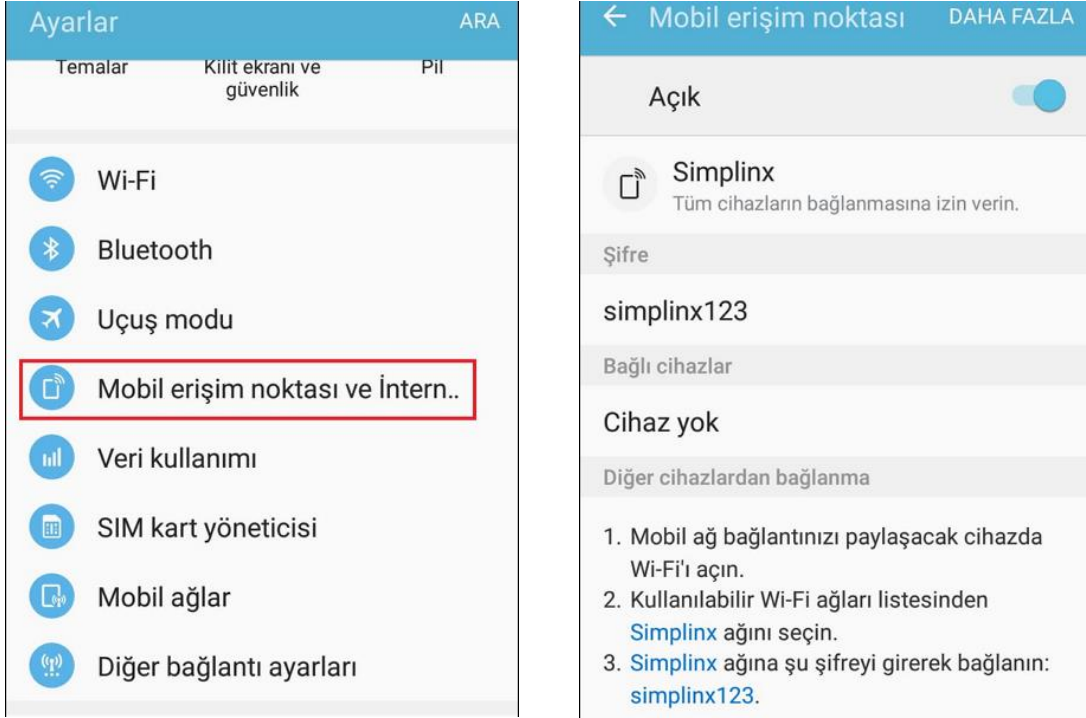


Faulty or incomplete connection may damage you, those around you, or devices. See the relevant documents and electrical drawings for detailed information.

3. Wi-Fi Connection

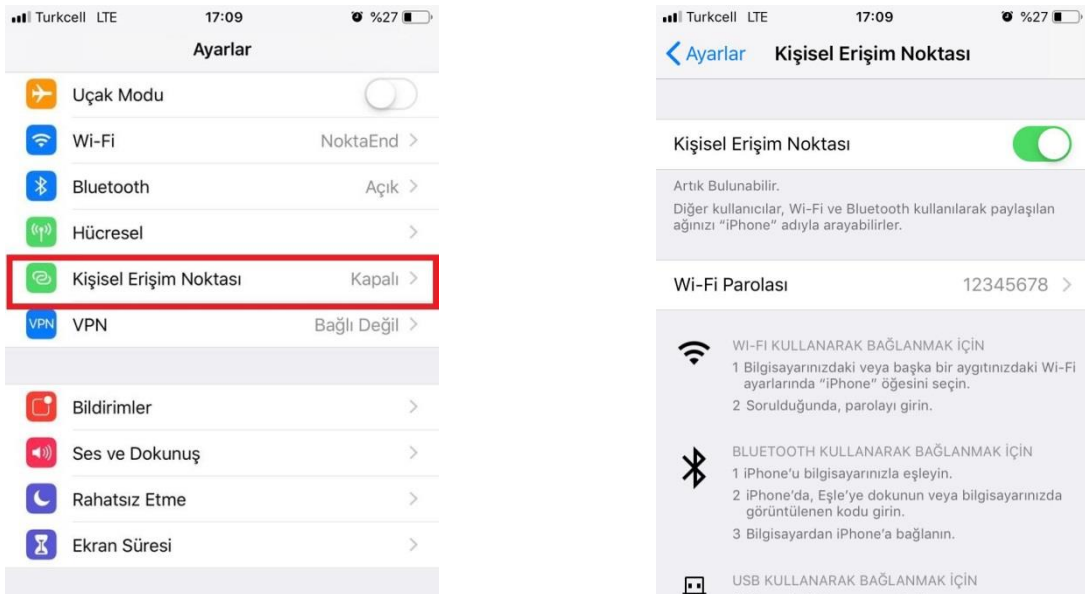
3.1. Sharing Wireless Internet from Android Phone to SMX-RNS

Enter your phone's settings section. From the Settings menu, go to **Mobile Access Point and Internet Sharing** (the menu content may vary depending on the phone brand and model) section and activate **Mobile Access Point** option from there.



3.2. Sharing Wireless Internet from iOS Phone to SMX-RNS

Enter your phone's settings section. From the Settings menu, go to **Personal Hotspot** section and then activate the **Personal Hotspot** option.



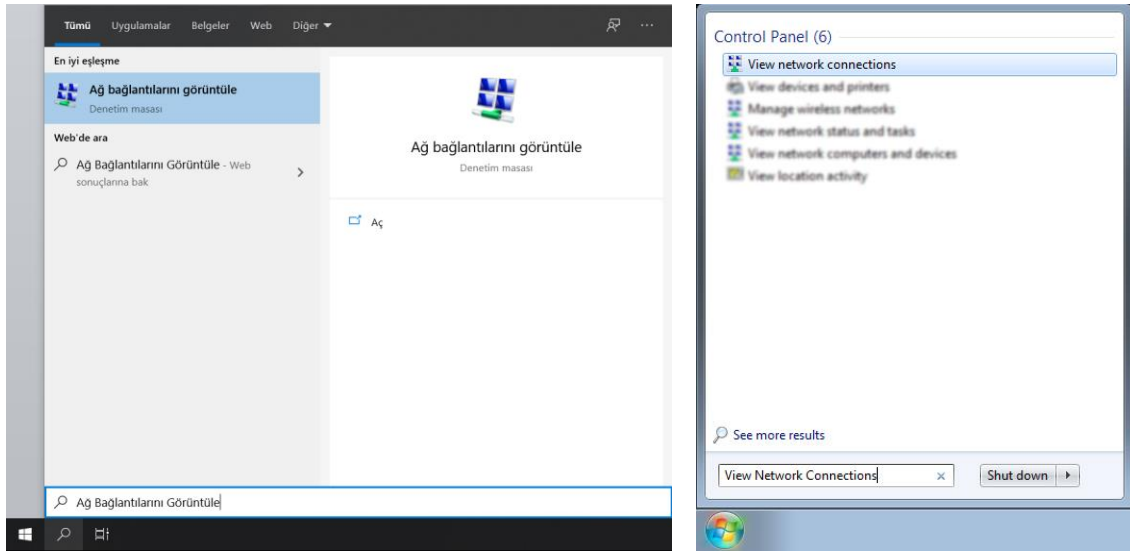
3.3. Adjusting Wireless Settings for SMX-RNS02 with Physical Connection



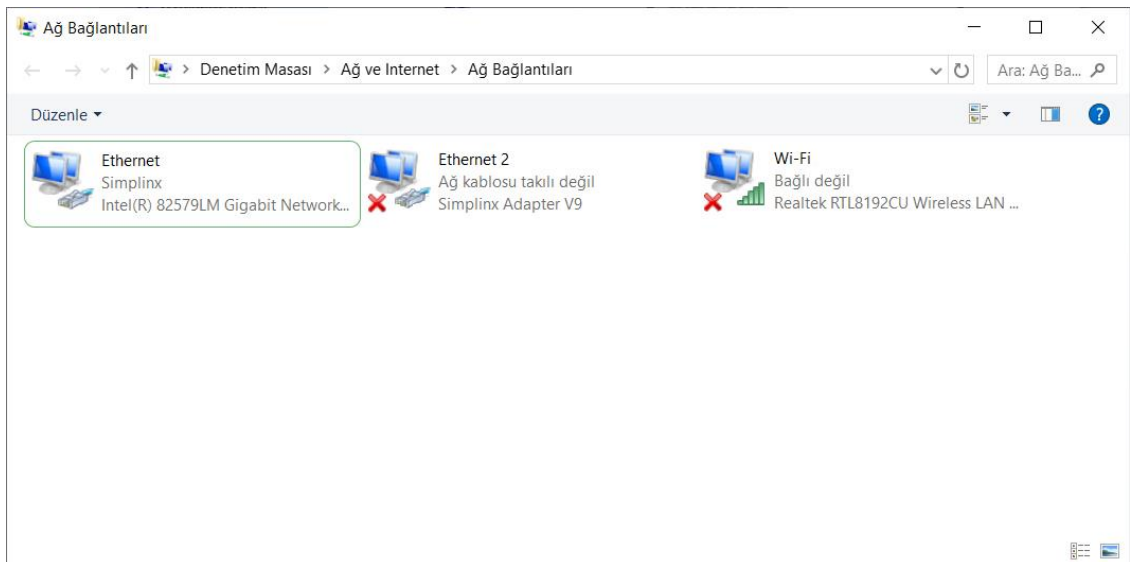
If you have a Wi-Fi module and if you want to adjust via Wi-Fi, you can skip this step.

The SMX-RNS02 module has two LAN connection ports. Plug one end of the Ethernet cable into the SMX-RNS02 module's RJ45 port, and plug the other end into your computer's corresponding Ethernet port.

By typing **“View Network Connections”** in the search bar (Start > Search Tab for Windows 7), go to that setting section in Windows.

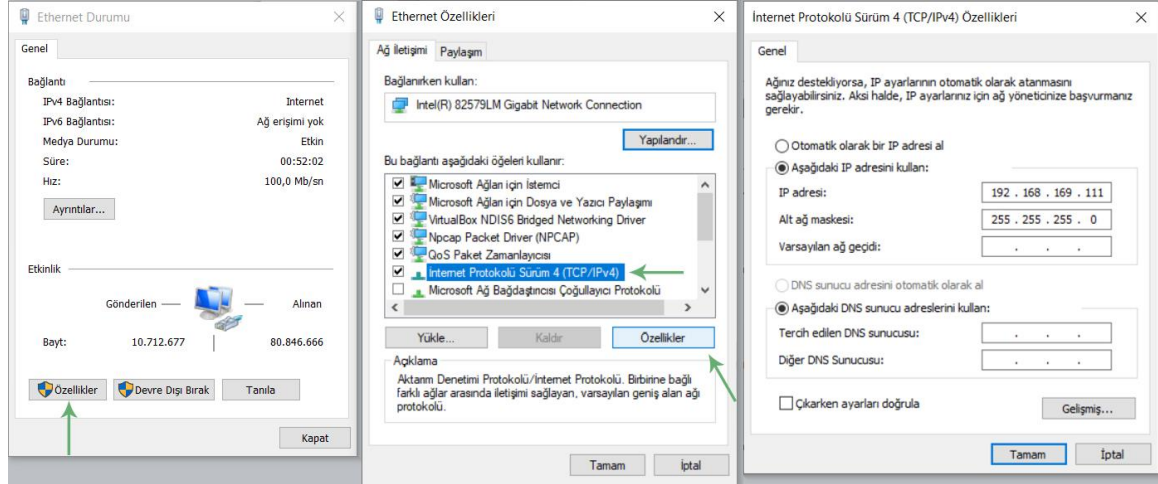


In the pop-up screen which is displayed, the network adapters on your computer will be listed.



Double-click with the mouse to the adapter for the hard-wired connection from this list.

Follow the navigation in order with the commands: **Properties > TCP/IPv4 > Properties**.



Fill in the relevant fields by selecting **Use the following IP address** from the pop-up screen: The settings should be as follows;

- **IP address:** 192.168.169.[0-254]
- **Subnet mask:** 255.255.255.0

Once the required settings have been made, close the opened windows by saving them and go to the address **192.168.169.254:3000** from your browser.

The home screen will welcome you, log in by typing your password.





Predefined web login password is "**simplinx**"

The screenshot shows the LAN Settings page. At the top, there is a navigation bar with links: LAN Ayarları | WAN Ayarları | Kablosuz Ayarları | Gelişmiş Ayarlar | Şifre Değiştir. A green notification box in the top right corner says "Giriş Yapıldı" (Login Successful). Below the navigation bar, a yellow warning message reads: "* Ayarları değiştirdikten sonra yeni ayarların etkin olması için lütfen cihazı yeniden başlatın." (After changing settings, please restart the device for the new settings to take effect). The main heading is "LAN Settings". Below it, there are two notes: "* LAN üzerindeki tüm cihazların bu IP aralığında olması gerekir." (All devices on the LAN must be in this IP range) and "* LAN ayarlarını uzak bağlantı ile değiştiriyor iseniz, ClientNode programında bağlantıyı koparın,tekrar bağlanın." (If you are changing LAN settings via remote connection, disconnect the connection in the ClientNode program and reconnect). The IP field is filled with "192.168.168.254". The Subnet Mask field is empty.

Once you logged in, go to the **Wireless Settings** page from the menu and fill in in the required areas that are related with the WiFi sharing settings of your phone and then save.

The screenshot shows the Wireless Settings page. At the top, there is a navigation bar with links: LAN Ayarları | WAN Ayarları | Kablosuz Ayarları | Gelişmiş Ayarlar | Şifre Değiştir. A green notification box in the top right corner says "Kaydedildi" (Saved). Below the navigation bar, a yellow warning message reads: "* Ayarları değiştirdikten sonra yeni ayarların etkin olması için lütfen cihazı yeniden başlatın." (After changing settings, please restart the device for the new settings to take effect). The main heading is "Kablosuz Ayarları". Below it, the sub-heading is "Kablosuz Alıcı Ayarları (Client)". There are two checked checkboxes: "Kablosuz Alıcı Aktif" and "DHCP Aktif". The SSID field is filled with "iPhone". The SSID Şifre field is filled with "12345678". The IP, Subnet Mask, and Gateway fields are empty. A blue "Kaydet" (Save) button is at the bottom.



After you change the settings, please restart the device in order to apply the new settings.

When your device is turned on again, plug the SMX-N1559 USB Wireless Adapter into the SMX-RNS02 module. After a while, your Simplinx device's **online** LED will be lighted with green color and the device will be connected to internet over Wi-Fi sharing of your mobile phone.

3.4. Setting Wireless Settings for SMX-RNS02 with Wi-Fi Connection

The SMX-RNS02 module has 2 USB ports. Insert the SMX-N1559 USB Wireless Adapter into the SMX-RNS02 module. In a few seconds, your device will broadcast Wi-Fi signal with its serial number.

Connect your PC to this Wi-Fi network which is created by your Simplinx device and go to the address **192.168.169.169.254:3000** from your browser.

The home screen will welcome you, log in by typing your password.



Predefined web login password is "**simplinx**"

LAN Ayarları | WAN Ayarları | Kablosuz Ayarları | Gelişmiş Ayarlar | Şifre Değiştir

Giriş Yapıldı

* Ayarları değiştirdikten sonra yeni ayarların etkin olması için lütfen cihazı yeniden başlatın.

LAN Settings

* LAN üzerindeki tüm cihazların bu IP aralığında olması gerekir.
* LAN ayarlarını uzak bağlantı ile değiştiriyorsanız, ClientNode programında bağlantıyı koparıp,tekrar bağlanın.

IP

Subnet Mask

Once you logged in, go to the **Wireless Settings** page from the menu and fill in in the required areas that are related with the WiFi sharing settings of your phone and then save.

LAN Ayarları | WAN Ayarları | Kablosuz Ayarları | Gelişmiş Ayarlar | Şifre Değiştir

Kaydedildi

* Ayarları değiştirdikten sonra yeni ayarların etkin olması için lütfen cihazı yeniden başlatın.

Kablosuz Ayarları

Kablosuz Alıcı Ayarları (Client)

Kablosuz Alıcı Aktif

SSID

SSID Şifre

DHCP Aktif

IP

Subnet Mask

Gateway

Kaydet



After you change the settings, please restart the device in order to apply the new settings.

When your device is turned on again, the **ready** LED will be lighted with green color first. After a while, your SimpLinx device's **online** LED will be lighted with green color and the device will be connected to internet over Wi-Fi Connection of your mobile phone.



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