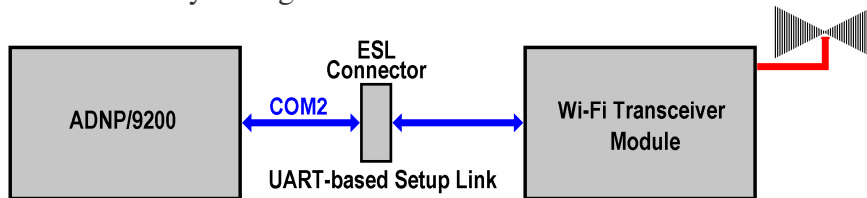


## How to change the E2W/ESL1 Wi-Fi Transceiver Setup

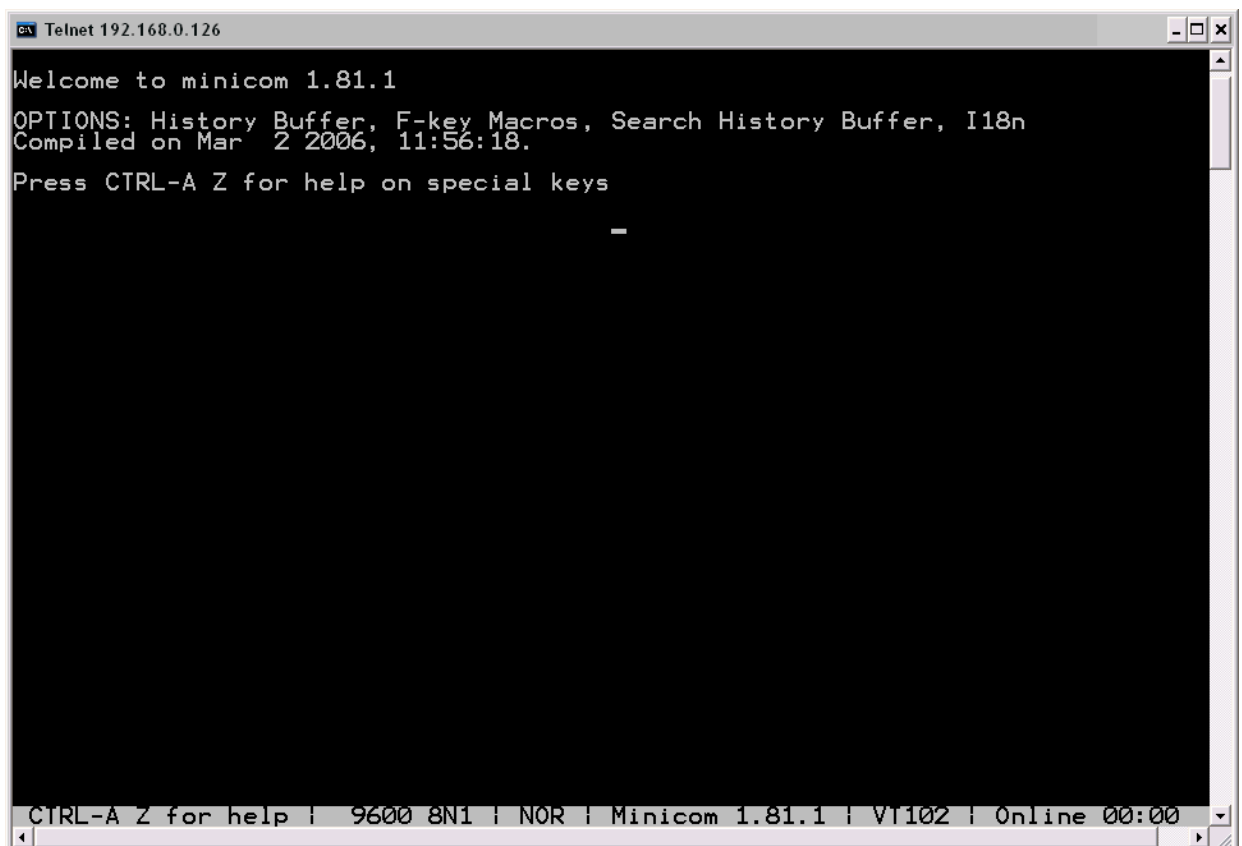
The E2W/ESL1 Wi-Fi transceiver module contains an own setup configuration. The most important data elements of this setup configuration are the SSID name (Wi-Fi network name), network mode, and the security configuration.



The E2W/ESL1 Wi-Fi transceiver module offer a UART-based setup interface to change the Wi-Fi setup. The COM2 serial port of the DIL/NetPC ADNP/9200 is connected to this interface.

- **1. Step:** The directory `/flash` within the ADNP/9200 root file system contain a pre-configured `minicom` terminal emulation program. This program allows a communication over the UART-based setup link between the ADNP/9200 and the E2W/ESL1 Wi-Fi transceiver module. Please execute the following ADNP/9200 embedded Linux commands within a Telnet session:

```
cd /flash
./minicom
```



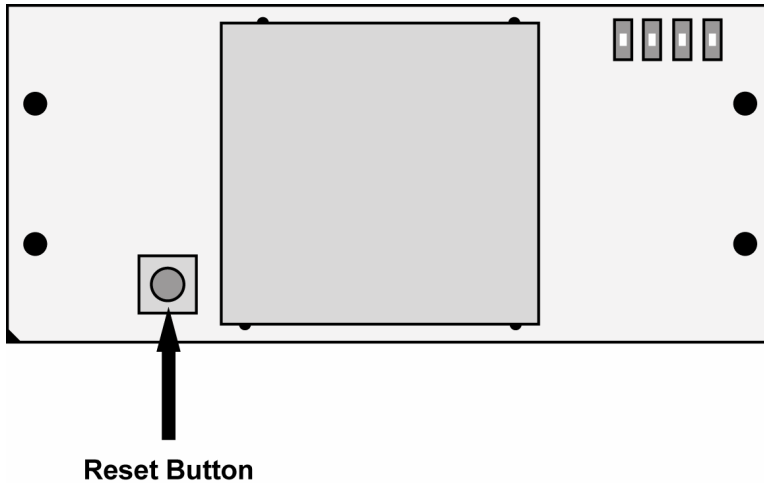
```

Telnet 192.168.0.126
Welcome to minicom 1.81.1
OPTIONS: History Buffer, F-key Macros, Search History Buffer, I18n
Compiled on Mar  2 2006, 11:56:18.
Press CTRL-A Z for help on special keys

CTRL-A Z for help | 9600 8N1 | NOR | Minicom 1.81.1 | VT102 | Online 00:00
  
```

The `minicom` terminal emulation program is now connected to the E2W/ESL1 Wi-Fi transceiver module UART interface.

- **2. Step:** Press with one hand the “x” key for the *minicom* terminal emulation program and hold this key down. Then press the reset button on the top of the E2W/ESL1 board and release this button after a short period of time.



The E2W/ESL1 Wi-Fi transceiver module firmware checks after each reset the presence of “x” characters. If some of these characters are detected within a specific period of time, the transceiver module firmware enters a setup mode.

```
Telnet 192.168.0.126
Welcome to minicom 1.81.1
OPTIONS: History Buffer, F-key Macros, Search History Buffer, I18n
Compiled on Mar  2 2006, 11:56:18.
Press CTRL-A Z for help on special keys

MAC address 00204A96226D
Software version V6.3.0.2 (061024)
Press Enter for Setup Mode

CTRL-A Z for help | 9600 8N1 | NOR | Minicom 1.81.1 | VT102 | Online 00:00
```

- **3. Step:** Now press the **enter** key for the *minicom* terminal emulation program. The E2W/ESL1 Wi-Fi transceiver module firmware shows the current setup within the *minicom* window and displays a small setup menu.

```

Telnet 192.168.0.126
Trigger input3: X
Message :
Priority: L
Min. notification interval: 1 s
Re-notification interval : 0 s

- Trigger 3
Serial trigger input: disabled
Channel: 1
Match: 00,00
Trigger input1: X
Trigger input2: X
Trigger input3: X
Message :
Priority: L
Min. notification interval: 1 s
Re-notification interval : 0 s

*** WLAN
WLAN: enabled
Topology: Infrastructure
Network name: default
Country: US
Security suite: none
TX Data rate: 54 Mbps auto fallback
Power management: disabled

Change Setup:
0 Server
1 Channel 1
2 Channel 2
3 E-mail
4 WLAN
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit
                                our choice ?
CTRL-A Z for help | 9600 8N1 | NOR | Minicom 1.81.1 | VT102 | Online 00:07

```

- **4. Step:** Select the menu item “0 Server” and change the **Network mode** to “2=Bridging (One Host)”.

```

Telnet 192.168.0.126
Re-notification interval : 0 s

*** WLAN
WLAN: enabled
Topology: Ad-Hoc
Network name: LTRX_IBSS
Country: US
Channel: 11
Security suite: none
TX Data rate: 54 Mbps auto fallback
Power management: not supported in adhoc mode

Change Setup:
0 Server
1 Channel 1
2 Channel 2
3 E-mail
4 WLAN
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit
                                Your choice ? 0

Network mode: 0=Wired Only, 1=Wireless Only, 2=Bridging(One Host) (1) ? 2

Change Setup:
0 Server
1 Channel 1
2 Channel 2
3 E-mail
4 WLAN
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit
                                Your choice ?
CTRL-A Z for help | 9600 8N1 | NOR | Minicom 1.81.1 | VT102 | Online 00:00

```

- **5. Step:** Select the menu item “4 WLAN”. First change the **Topology** to “0=Infrastructure”. Then change the **Network name (SSID)** to “default”.

```

Telnet 192.168.0.126
6 Security
7 Defaults
8 Exit without save
9 Save and exit          Your choice ? 0
Network mode: 0=Wired Only, 1=Wireless Only, 2=Bridging(One Host) (1) ? 2

Change Setup:
0 Server
1 Channel 1
2 Channel 2
3 E-mail
4 WLAN
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit          Your choice ? 4

Topology: 0=Infrastructure, 1=Ad-Hoc (1) ? 0
Network name (SSID) (LTRX_IBSS) ? default
Security suite: 0=none, 1=WEP, 2=WPA, 3=WPA2/802.11i (0) ?
TX Data rate: 0=fixed, 1=auto fallback (1) ?
TX Data rate: 0=1, 1=2, 2=5.5, 3=11, 4=18, 5=24, 6=36, 7=54 Mbps (7) ?
Enable power management (N) ?

Change Setup:
0 Server
1 Channel 1
2 Channel 2
3 E-mail
4 WLAN
5 Expert
6 Security
7 Defaults
8 Exit without save
9 Save and exit          Your choice ?

CTRL-A Z for help | 9600 8N1 | NOR | Minicom 1.81.1 | V1102 | Online 00:01

```

- **6. Step:** Select the menu item “9 Save and exit”. This selection stores the new Wi-Fi transceiver module setup configuration. Then check the Wi-Fi connection between the PC and the ADNP/9200 with a *ping*:

**ping 192.168.1.126**

For more information please see the document *mHTA9200-09.pdf: How to use the E2W/ESL1 Wi-Fi Adapter*.

```

Eingabeaufforderung
C:\>ping 192.168.1.126

Ping wird ausgeführt für 192.168.1.126 mit 32 Bytes Daten:

Zeitüberschreitung der Anforderung.
Antwort von 192.168.1.126: Bytes=32 Zeit=7ms TTL=64
Antwort von 192.168.1.126: Bytes=32 Zeit=5ms TTL=64
Antwort von 192.168.1.126: Bytes=32 Zeit=4ms TTL=64

Ping-Statistik für 192.168.1.126:
    Pakete: Gesendet = 4, Empfangen = 3, Verloren = 1 (25% Verlust),
    Ca. Zeitangaben in Millisek.:
        Minimum = 4ms, Maximum = 7ms, Mittelwert = 5ms

C:\>_

```

**Please note:** Sometime the first *ping* goes wrong. This is normal. The E2W/ESL1 Wi-Fi transceiver module needs some time to find and connect to an access point.

That is all.