

KC-2W (N2K and NMEA0183 Bidirectional Converter)

Webpage configuration function Instruction Guide

***Applicable for KC-2W units updated with Firmware: N2K_0183_ 0.6.5*

With the ONWA KC-2W firmware **N2K_0183_ 0.6.5** update, user can use a PC browser to configure KC- 2W settings, such as output baudrate, output update rate, change WIFI username and password etc..

Note: This function can be used only by **KC-2W with WIFI module**

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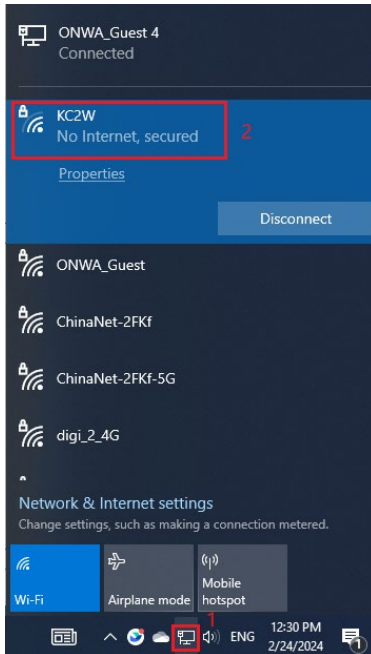
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1. Connect to the Wi-Fi of KC2W and log in to the configuration webpage for setup

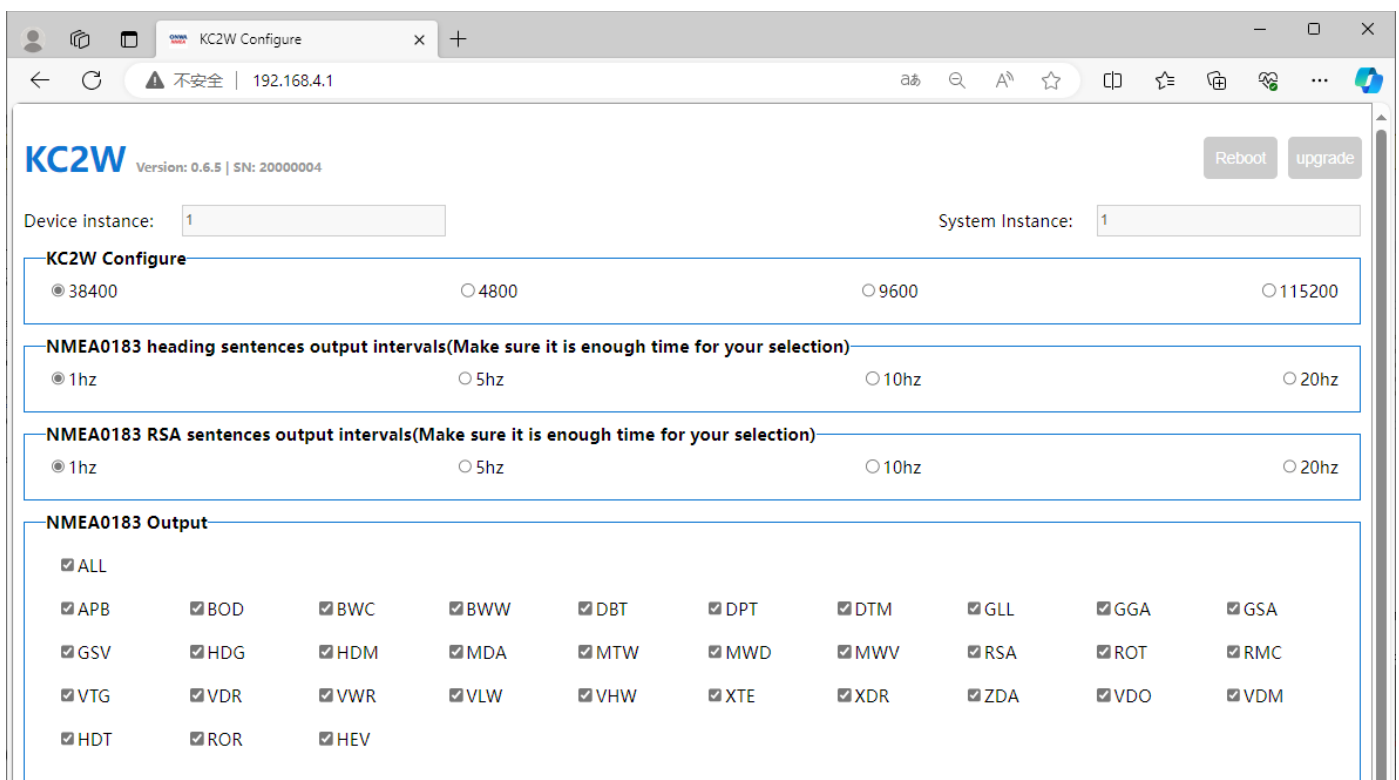
1) Connect the PC Wi-Fi to KC-2W

Step 1. Move the cursor to the Wi-Fi connection icon (1) and left click to open Network and Internet settings

Step 2. Connect to KC2W Wi-Fi connection (2)



2) Open your Internet browser (example IE or Chrome) and type http://192.168.4.1



NMEA2000 Output

☒ ALL

☒ 126992

☒ 128259

☒ 129039

☒ 129540

☒ 129809

☒ 130578

☒ 127237

☒ 128267

☒ 129040

☒ 129793

☒ 129810

☒ 127245

☒ 128275

☒ 129041

☒ 129794

☒ 129811

☒ 127488

☒ 129025

☒ 129044

☒ 129795

☒ 129812

☒ 127250

☒ 129026

☒ 129283

☒ 129797

☒ 130306

☒ 127251

☒ 129029

☒ 129284

☒ 129798

☒ 130310

☒ 127252

☒ 129033

☒ 129291

☒ 129801

☒ 130311

☒ 127258

☒ 129038

☒ 129539

☒ 129802

☒ 130312

Wifi Setting

NMEA0183 Input monitor: 10110

N2K to NMEA0183 monitor: 10111

Spot name:

KC2W_ESP32_a13f1016

Spot passwd:

12345678

Spot IP 192.168.4.1

Wifi name:

Wifi passwd:

Wifi ip:

Setting Wifi

Wifi Setting

NMEA0183 Input monitor: 10110

Spot name:

Spot IP 192.168.4.1

Wifi name:

Wifi ip:

N2K to NMEA0183 monitor: 10111

Spot passwd:

Wifi passwd:

Setting Wifi

- 3) Once the KC2W webpage is open, You can now configure all settings of the ONWA KC-2W, simply click on the item you want to change.
- Example: You want to change KC-2W NMEA0183 output baudrate from 38400 (default) to 9600, All you need to do is simply click “9600”.
- Then you will see a “success” message appear on the screen, that means the configuration is accepted.

[illegible]

2. How to Change the Wi-Fi Network Name or Password on a KC2W Device

- 1) After editing the 'Spot name ' or 'Spot passwd ' as shown in the figure below, click on 'Setting Wifi' at the bottom. If the interface displays 'success', it means that the modification was successful. Next, you only need to log in with the new Wi-Fi name and password. Please follow the instructions below to proceed.

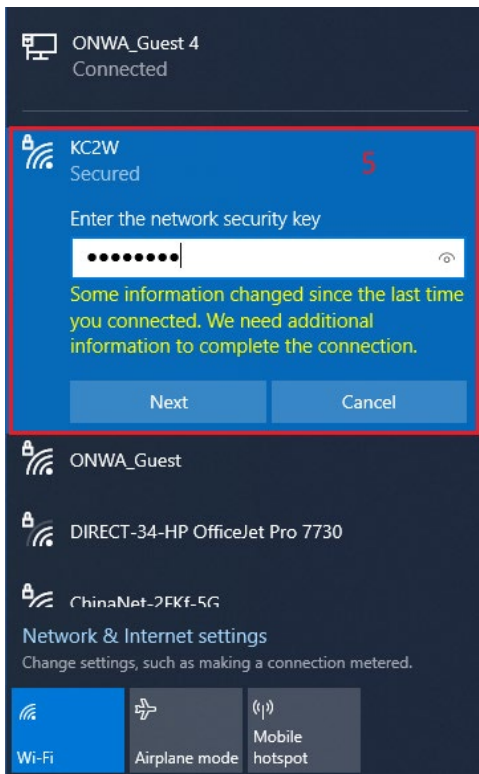
The screenshot shows the 'KC2W Configure' web interface in a browser window. The address bar shows '192.168.4.1'. The interface is divided into several sections:

- NMEA0183 Output:** A grid of checkboxes for various NMEA0183 protocols. Most are checked, including APB, BOD, BWC, BWW, DBT, DTM, GLL, GGA, GSA, GSV, HDG, HDM, MDA, MTW, MWD, MWV, RSA, ROT, RMC, VTG, VDR, VWR, VLW, VHW, XTE, XDR, ZDA, VDO, VDM, HDT, ROR, and HEV.
- NMEA2000 Output:** A grid of checkboxes for various NMEA2000 protocols. Most are checked, including 126992, 127237, 127245, 127488, 127250, 127251, 127252, 127258, 128259, 128267, 128275, 129025, 129026, 129029, 129033, 129038, 129039, 129040, 129041, 129044, 129283, 129284, 129291, 129539, 129540, 129793, 129794, 129795, 129797, 129798, 129801, 129802, 129809, 129810, 129811, 129812, 130306, 130310, 130311, 130312, and 130578. A red box highlights the 'success' status next to protocol 129812.
- Wifi Setting:** This section contains fields for 'Spot name' (KC2W), 'Spot passwd' (12345678), 'Spot IP' (192.168.4.1), 'Wifi name', 'Wifi passwd', and 'Wifi ip'. A red box highlights the 'Setting Wifi' button at the bottom.

- 2) Scroll to the top of the webpage and click on 'Reboot' in the upper right corner of the page to restart the KC2W device (you can also perform this step by power cycling the KC2W).

The screenshot shows the top of the 'KC2W Configure' web interface. The header includes the 'KC2W' logo, version '0.6.5', and serial number 'SN: 20000004'. Below this, there are fields for 'Device instance' (1) and 'System Instance' (1). At the bottom, there are radio buttons for selecting a configuration profile: 38400, 4800, 9600 (selected), and 115200. In the upper right corner, there is a 'Reboot' button highlighted with a red box, and an 'upgrade' button next to it.

- 3) Move the cursor to the Wi-Fi connection icon on your computer and left-click to open the Network and Internet Settings. In the Wi-Fi list, find the Wi-Fi name you saved and click on it to connect. Wait for the window shown below to appear, enter the saved password, and click 'Next' to wait for the connection to be successful.



3. Wi-Fi Settings for KC2W

- 1) Enter the Wi-Fi name and password of the Wi-Fi you want to connect to in "Wifi name" and "Wifi passwd" respectively. Next, click on "Setting Wifi" at the bottom of the webpage and wait for the "success" prompt to appear on the page.
- 2) Power on the KC2W device again.
- 3) Reconnect your computer to the KC2W Wi-Fi network: Open the Wi-Fi list and connect to the KC2W's own Wi-Fi network (note that it is the Wi-Fi network mentioned in the 'Spot name' on the webpage).
- 4) Refresh the previously opened KC2W configuration webpage or log in again. Scroll down to the bottom of the webpage to see the 'Wifi ip' address displayed below 'Wifi name'.

Wifi Setting

NMEA0183 Input monitor: 10110 N2K to NMEA0183 monitor: 10111

Spot name:	<input type="text" value="KC2W"/>	Spot passwd:	<input type="text" value="12345678"/>
Spot IP 192.168.4.1			
Wifi name:	<input type="text" value="OPPO"/>	Wifi passwd:	<input type="text" value="12345678"/>
<div>Wifi ip: 192.168.1.1</div>			

- 5) Log in to the KC2W configuration webpage using the recently added Wi-Fi: Open the Wi-Fi list again, find the Wi-Fi you just added (corresponding to the "Wifi name" on the webpage), connect to it, and once connected, copy the address from "Wifi ip" and paste it into the browser to log in to the webpage.

Note: For a more stable usage experience, it is recommended not to use KC2W's hotspot mode and station mode simultaneously.

Hotspot mode: KC2W's own Wi-Fi, for example, when a phone shares its network hotspot.

Station mode: KC2W functions as a Wi-Fi client, for example, when a phone connects to a router, it operates in station mode.

4. Using TCP Data over the Network

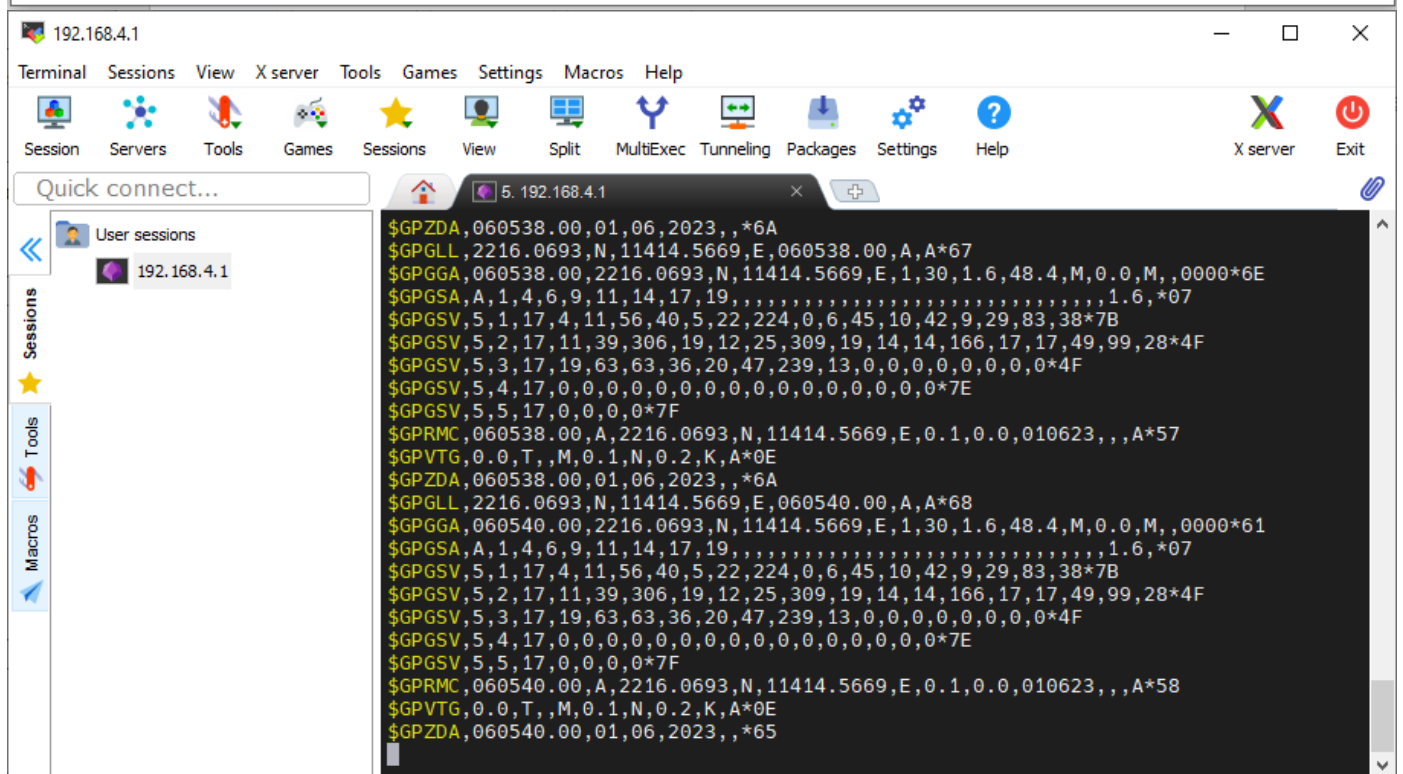
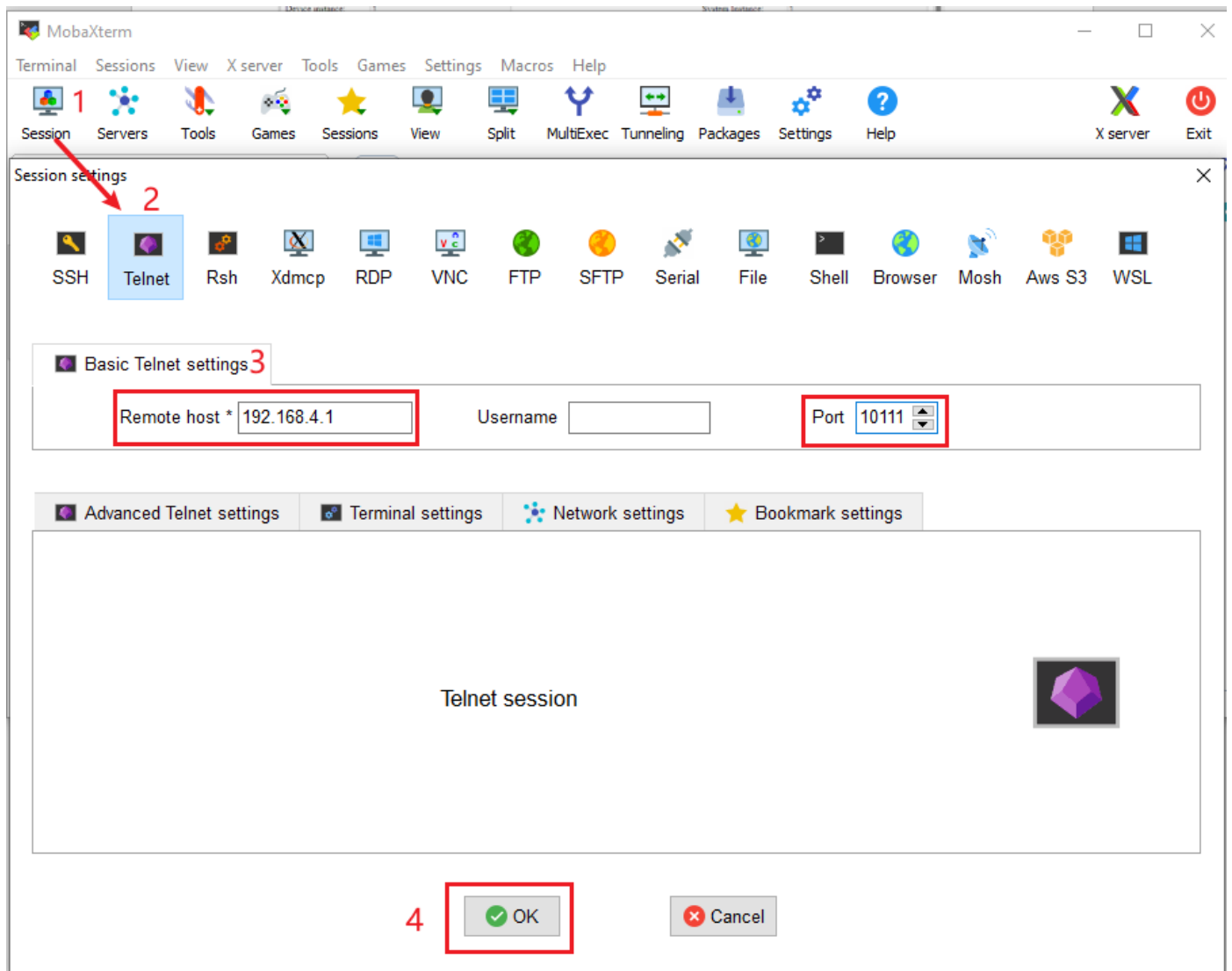
The NMEA0183 data input/output can be received through the network ports "10110" and "10111". Additionally, these data can be shared with other products like ONWA DigiNav. The details are as follows:

1) Receive input and output NMEA0183 data

10110: Receive the NMEA0183 data inputted to KC2W

10111: Receive the NMEA0183 data converted and outputted by KC2W from N2K

Open a remote network tool with TCP connection capability, such as MobaXterm, and then follow the instructions in the figure below to establish a connection. You will be able to see the received data.



2) Sending NMEA0183 Data to ONWA DigiNav

Open the PC or Pad version of DigiNav and navigate to the TCP settings page. The following instructions will use the PC version of DigiNav as an example:

In the "Target TCP" section of the "Input settings" module, enter the "Host" (192.168.4.1) and "Port" (10110/10111). Check the "Enabled" option. When the "State" displays "Connected," it indicates a successful connection. DigiNav has started receiving NMEA0183 data from either "10110" or "10111."

