

Blue Sky Network

HawkEye OBD-II Interface Installation Guide

Addendum to HawkEye 5000 Series Installation Guide

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Revisions

Rev	Date	Author	Description
A.0	7/13/2011	MC	Initial Version for Yamei OBDII adapter only;
B.0	7/15/2012	HW	Added B&B OBDII adapter;
C.0	7/18/2012	HW	Added observations and warnings for B&B OBDII configuration procedure.
C.1	7/20/2012	HW	Added wire-tie recommendation to secure the mini-USB connector.

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Figure 1.B: Using Yamei OBD and its necessary components

Hardware Setup

Make sure the mini-USB-to-USB adapter cable (2) is securely fastened to the back of the HawkEye device (1), as shown in Figure 2.



Figure 2

Next, connect the USB-to-serial adapter (3) to the mini-USB-to-USB (2) adapter, as shown in Figure 3.

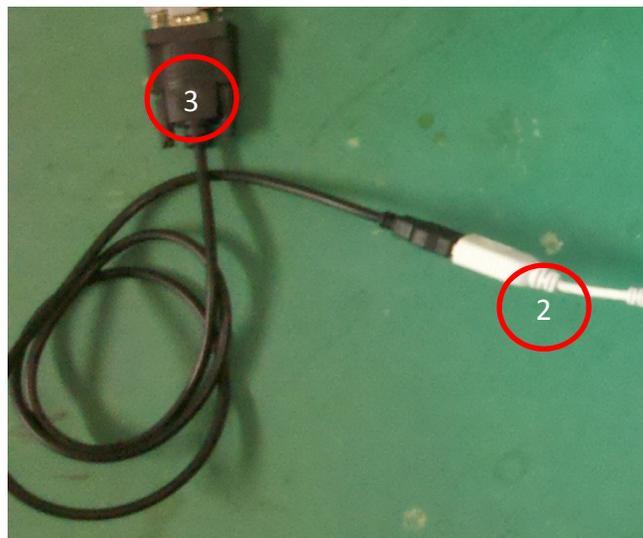


Figure 3

Hardware Setup (CONTINUED)

Connect the USB-to-serial adapter (3) to the serial-to-OBD-II adapter-module cable harness (4), as shown in Figure 4.

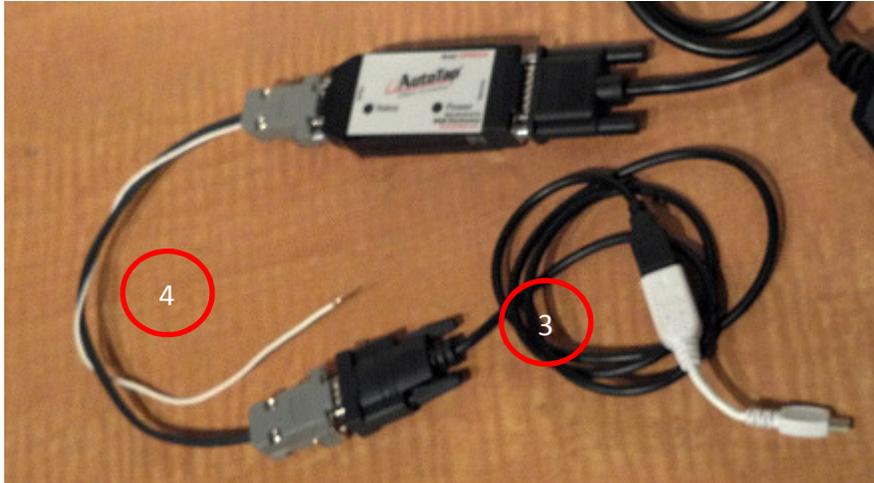


Figure 4.A Using B&B OBDii Adpater

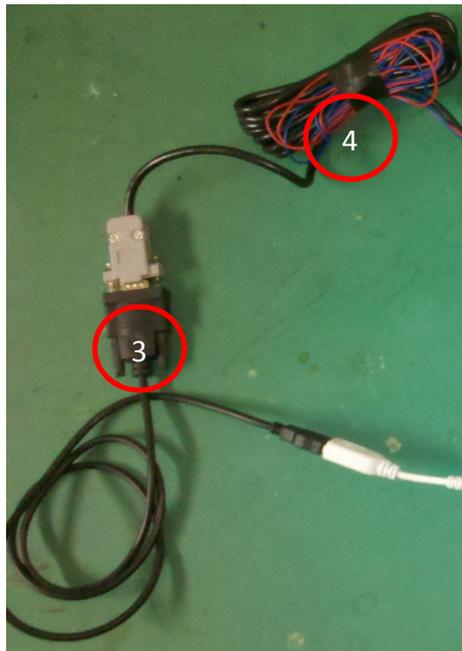


Figure 4.B Using Yamei OBDii Adpater

With the OBDII interface module (5) face up, connect the black, 6-pin Molex connector at the end of the serial-to-OBD-II adapter-module cable harness (4) to the input on the right, as shown in Figure 5.



Figure 5.A Using B&B OBDii Adapter



Figure 5.B Using Yamei OBDii Adapter

Hardware Setup (CONTINUED)

Connect the OBD-II adapter cable (6) to the OBD-II adapter module (5), as shown in Figure 6.



Figure 6.A Using B&B OBDii Adapter

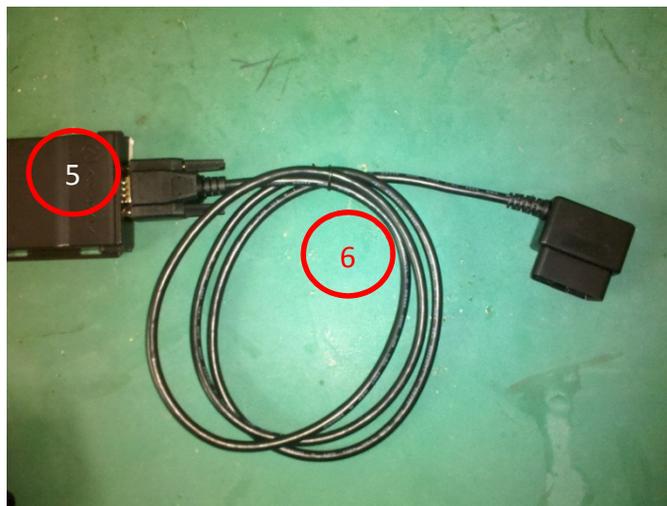


Figure 6.B Using Yamei OBDii Adapter

Hardware Setup (CONTINUED)

Add two Zip Ties to secure the mini-USB connector and cable, as shown in Figure 6.

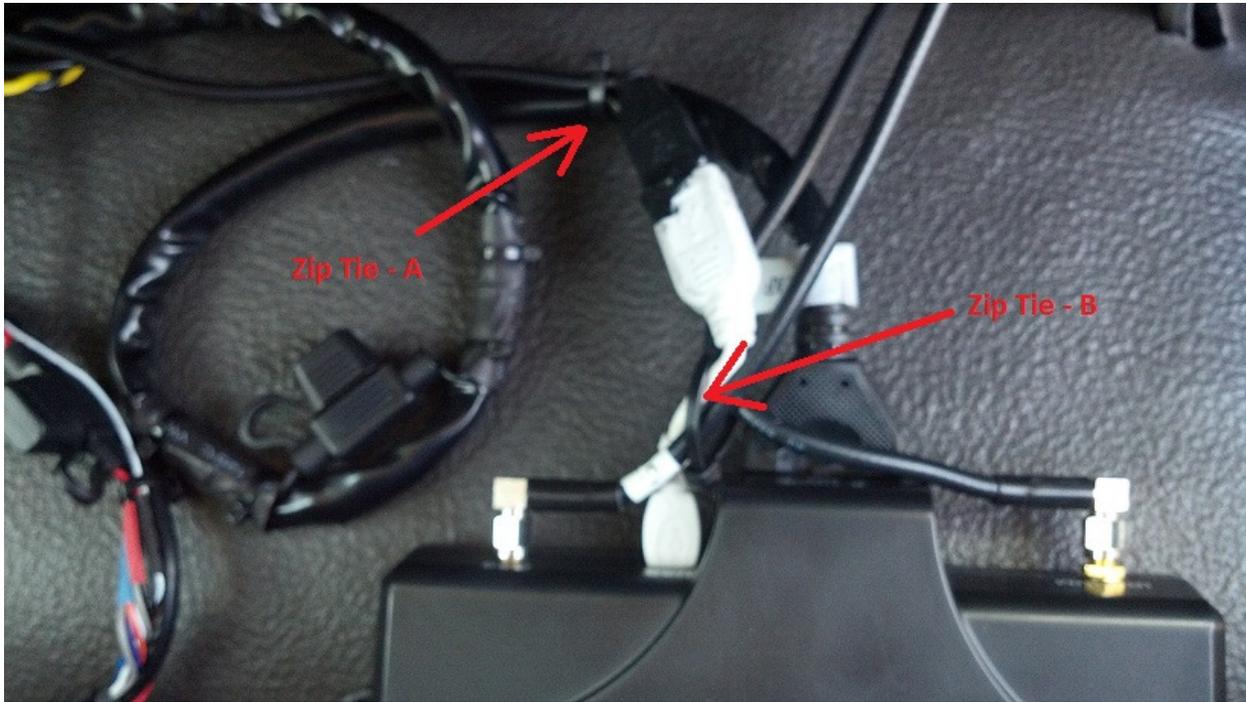


Figure 7 Secure mini-USB connector

Hardware Setup (CONTINUED)

***** WARNING *****

This step should be performed at last before turn the Ignition On to avoid B&B OBDII Adapter from any auto configuration issue.

Attach the OBD-II adapter cable (6) to the OBD-II adapter in the automobile (7) as shown in Figure 7. Note that the location within the automobile will vary.



Figure 8 Connecting OBDii connector

Verify Installation – B&B OBDII ADAPTER

To verify proper installation and operation of the OBD-II adapter, the following procedure must be followed.

Step 1: **Do not turn the Ignition On** until you are instructed to do so in the later step.

Step 2: Double check all the interconnections described in the “Hardware Setup” section again **by using B&B OBDII adapter and harness.**

Step 3: Connect **the Ignition white cable (no. 7)** from B&B OBDII harness to Hawkeye Device’s Ignition white cable (no. 6).

Step 4: Connect **Hawkeye Touch** to both vehicle Ignition line and Hawkeye Device’s serial cable.

Step 5: Only connect B&B’s OBDII connector to the vehicle’s OBDII connector at this stage.

Step 6: Only turn the Ignition On at this stage and then wait for two times of chirp sounds before the “Disclaimer page” is displayed on Hawkeye Touch screen. Observe that both Red and Green LEDs of B&B OBDII adapter are staying solid in few seconds. **Observe that both Red and Green LEDs of B&B OBDII adapter go to solid in few seconds which indicates B&B OBDII adapter detected a new vehicle. In case of both LEDs are turned On and Off one after another which indicates B&B OBDII adapter has been configured with different vehicle so that it needs to be removed and reset to “vehicle detects mode” first by a special Terminal App on Windows PC .**

Step 7: **Press the “I Accept” button** on the “Disclaimer page” and then wait for at least 2 minutes. Observe that the Green LED of B&B OBDII adapter will start to flash which indicating the configuration process is active.

Step 8: Wait for two OBDII configuration messages on the Hawkeye Touch screen. First screen shows **“OBDII module is being configured.”** and the second screen shows **“OBDII configuration complete.”** The second screen will stay on for 30s before it is closed.

Step 9: After the second notification message disappeared **then turn the Ignition Off** again.

Step 10: Wait for at least 10 seconds and then **turn the Ignition On** again.

Step 11: Go to the **“Verification installation from BSN Sky Router Web application”** at the end of this document.

Step 12: **Turn the Ignition Off** at the end to conclude the OBDII adapter configuration process.

Verify Installation – YAMEI OBDII ADAPTER

To verify proper installation and operation of the OBD-II adapter, power on your vehicle and check the LED statuses on the OBDII interface module. You should see an internal red and green LED through the Molex connectors.

Once the LEDs are displaying properly, your antenna has a clear view of the sky, and your HawkEye device is reporting, you can verify that the OBD-II data is being received by logging onto your SkyRouter account under reports.

Verify Installation **FROM SKY ROUTE WEB APPLICATION**

The device generates OBD-II status indicator on a valid power on event. You can verify the device status on your administrator login on SkyRouter under the Manage tab, select the View Asset option for the asset being tested. A pop up window will appear, as shown in Figure 8.

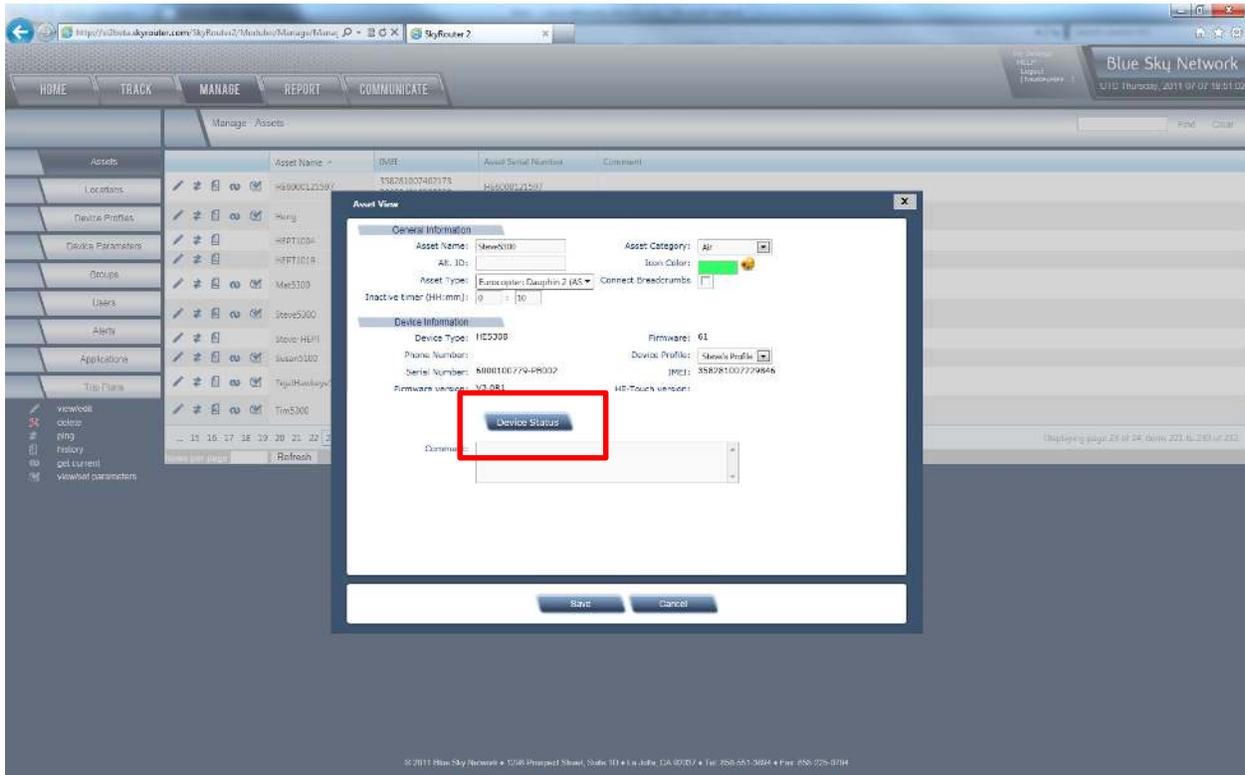


Figure 8

Verify Installation FROM SKY ROUTE WEB APPLICATION (CONTINUED)

Select device status (shown in Figure 8 in red) and another pop up window will appear, as shown in Figure 9.

The screenshot shows the Blue Sky Network web application interface. A pop-up window titled "Device Status History" is displayed over the "Manage Devices" section. The window has a "Select By Time Frame" and "Select By Date Range" option. The "Date Range" is set to "10/24/2012 08:48". A table lists device status history entries. The first entry is highlighted with a red border:

Date/Time	Device Version	HT Version	Buffer Full	Gsm Binary	Influx Binary	Device	Value
10/24/2012 08:48:12 AM	v2.0f64	bsntable_v1.31				OBD2	True
10/24/2012 08:40:07 AM						OBD2	True
10/24/2012 08:35:21 AM	v2.0f64	bsntable_v1.31				OBD2	True
10/23/2012 04:53:29 PM						OBD2	True
10/23/2012 04:48:12 PM	v2.0f64	bsntable_v1.31				OBD2	True
10/23/2012						OBD2	False

The background shows the "Manage Devices" section with a list of devices and their parameters. The footer of the application displays the copyright information: "© 2012 Blue Sky Network • 1298 Prospect Street, Suite 1D • La Jolla, CA 92037 • Tel: 858-551-3894 • Fax: 858-225-0794".

Figure 9

You should see a valid date and time. In the Device section, it should say “OBD2” and value should display as “True”.