1. Introduction

Note: For technical issues, please email the developer: info@meteohub.de.

Please reference Section 7.1.1 for instructions on providing remote access to the developer. Provide the URL and your password.

The following quick start programming guide provides basic instructions for connecting your nano to your weather station, router and the Internet. This is a supplement to the detailed information provided at www.MeteoBridge.com.

Note: Ambient Weather uses the terms WeatherBridge and MeteoBridge interchangeably. WeatherBridge is the complete product, including the Linux computer (TP-LINK), and operating system. The operating system is referred to as MeteoBridge, developed by smartbedded UG, on the web at www.MeteoBridge.com.

Note: The WeatherBridge has been programmed and licensed by Ambient Weather before you receive it. For warranty replacement, please contact Ambient Weather directly. Ambient Weather warranties
2. Packing List

The packing list is as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WeatherBridge nano</td>
</tr>
<tr>
<td>2</td>
<td>Instruction Card</td>
</tr>
</tbody>
</table>

3. Preparing the Console or Envoy

Before inserting the Nano into the console or Envoy, set up your console or Envoy. This includes setting the correct date and time, configuring the transmitter channels (if you have more than one sensor array), rain bucket size, and station altitude. Make sure the weather station is receiving data from all of the sensors. Please refer to the console or Envoy manual for details. The manuals are available at www.davisnet.com.

4. Plug the Nano into the Console or Envoy

1. Power down the display console by removing the batteries and AC adapter. Failure to remove power to the console or Envoy before installing or uninstalling any data logger may cause damage to the data logger or console.
2. Open the battery compartment door.
3. Look for the **EXPANSION** connector inside the battery compartment. Figure 2 is an example for the Davis Vantage Vue.

![Figure 2](image1)

**Figure 2**

**Note:** For Weather Envoy: See the Weather Envoy User Guide instructions for opening the Envoy and installing the data logger. (The manual is available online at www.davisnet.com.)

4. Firmly insert the Nano into the large receptacle marked **EXPANSION** inside the battery compartment. Do this with firm but not brute force. If it does not align properly, try again.

![Figure 3](image2)

**Figure 3**

5. Reconnect the AC adapter and then reinsert the batteries. Leave the battery door open in the event additional diagnosis is required.
6. Wait about two minutes for the Nano to completely boot up.

7. For consoles, the console will power up in Setup Mode. Press and hold the **DONE** button for two seconds to exit the console setup mode.

5. **Accessing the Nano over your Local Network**

The Nano broadcasts a WiFi signal. To connect your computer or smart device to the Nano for programming, open your WiFi settings from your computer or smart device, and connect to **meteobridge-xxxxxxxxxxxxx** (where xxxxxxxxxxxx is the MAC address of your device).

When prompted, enter the password: **meteobridge**

Below is an example for Windows and an iPhone.

![Figure 4](image)

Once you are connected to the Nano, open a web browser and type in the following URL:

http://192.168.169.1

You will be prompted for a Username and Password. Enter:

Username: **meteobridge**
Password: **meteobridge**

The Nano will scan your WiFi network. This may take a few minutes to display the Network Administration Page.
6. **Network Administration and Connecting to your WiFi Router**

1. Under **WiFi Client**, enter your wireless router settings. Select the AP SSID from the pull down menu **Known SSIDs**. Enter your router’s WiFi password (AP Passphrase).

2. Tap **Save and Test**. Wait about one minute. Look for the **System Message** as shown in Figure 5.

   If successful, you will see the **System Message** below. If not successful, your settings did not match your WiFi settings. Please recheck and try again.

   ![Figure 5](image)

3. The Nano is now part of your wireless network. Please note the Nano’s IP address as you will need it to login from your WiFi network later on:
System Message: It can be reached at IP: ________________________________

4. Advanced network settings are available for statically assigning an IP address to the Nano, or using the Nano with a proxy server.

5. Press Save and Apply and Reboot to leave finish the network admin access, and to restart the Nano.

6. After a few minutes, the Nano will be available for configuration at the IP address in Step 3.

7. Watch the LED on the Nano module. It will begin blinking.
   It will begin flashing rapidly, which indicates that it is trying to connect to the Internet.
   When the light stops flashing and stays on, the Nano has successfully connected to the Internet.

8. You can now close the console’s battery cover.

9. Open your favorite Web Browser and enter the IP address obtained in Step 3.
   In the example above, you would enter: http://192.168.0.42 (your IP address will be different).
   Don’t forget to enter the http header (http://)/

   You will see the Nano’s System Page, as shown in Figure 6.

7. **System**

   From the Menu tab, select **System**.
Figure 6

7.1 Security (password)
The default username and password is meteobridge and meteobridge. There is likely no need to
change this, but you can enter a new username and password. If you change it, write it down:

<table>
<thead>
<tr>
<th>Username: (default is meteobridge)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Password: (default is meteobridge)</td>
</tr>
</tbody>
</table>

To make the changes permanent, select Save and Apply.

### 7.1.1 Remote Login

To login remotely, from the System Tab, select the checkbox Allow login from the internet via this URL.

Note: It can take up to one hour for this remote login URL to become active.

[Security Settings](#)

New Password: 
New Password: 
Internet Login: [ Allow login from the Internet via this URL ]

**Figure 7**

### 7.2 Advanced System Settings

For advanced settings, please visit:

https://www.meteobridge.com/wiki/index.php/Meteobridge_NANO

### 8. Weather Station

Enter your weather station receiver type as shown in Figure 8 and Select Save.
For advanced settings, please visit:

https://www.meteobridge.com/wiki/index.php/Meteobridge_NANO

9. **Live Data**

Select the **Live Data** Page to view a summary of your live data.
### Historical Data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>min</td>
<td>max</td>
<td>min</td>
<td>max</td>
<td>min</td>
<td>max</td>
</tr>
<tr>
<td>Indoor temp</td>
<td>27.5°C</td>
<td>27.1°C</td>
<td>30.1°C</td>
<td>29.9°C</td>
<td>30.9°C</td>
<td>25.7°C</td>
<td>30.9°C</td>
</tr>
<tr>
<td></td>
<td>61.5°F</td>
<td>80.0°F</td>
<td>86.5°F</td>
<td>86.2°F</td>
<td>87.3°F</td>
<td>78.3°F</td>
<td>87.3°F</td>
</tr>
<tr>
<td>Indoor hum</td>
<td>39%</td>
<td>31%</td>
<td>39%</td>
<td>30%</td>
<td>33%</td>
<td>30%</td>
<td>44%</td>
</tr>
<tr>
<td>Indoor dew</td>
<td>12.0°C</td>
<td>9.0°C</td>
<td>12.0°C</td>
<td>8.0°C</td>
<td>12.0°C</td>
<td>0.0°C</td>
<td>12.0°C</td>
</tr>
<tr>
<td></td>
<td>53.8°F</td>
<td>49.2°F</td>
<td>53.8°F</td>
<td>48.2°F</td>
<td>53.8°F</td>
<td>46.4°F</td>
<td>53.8°F</td>
</tr>
<tr>
<td>Indoor press</td>
<td>966.0mb</td>
<td>966.1mb</td>
<td>970.2mb</td>
<td>976.7mb</td>
<td>962.3mb</td>
<td>970.2mb</td>
<td>976.7mb</td>
</tr>
<tr>
<td></td>
<td>28.60inhHg</td>
<td>28.59inhHg</td>
<td>28.65inhHg</td>
<td>28.47inhHg</td>
<td>28.43inhHg</td>
<td>28.65inhHg</td>
<td>28.47inhHg</td>
</tr>
<tr>
<td>Outdoor temp</td>
<td>35.1°C</td>
<td>28.4°F</td>
<td>35.1°C</td>
<td>24.9°F</td>
<td>42.4°F</td>
<td>22.9°F</td>
<td>42.4°F</td>
</tr>
<tr>
<td></td>
<td>95.2°F</td>
<td>80.2°F</td>
<td>95.2°F</td>
<td>76.8°F</td>
<td>109.0°F</td>
<td>73.0°F</td>
<td>109.0°F</td>
</tr>
<tr>
<td>Outdoor hum</td>
<td>25%</td>
<td>21%</td>
<td>51%</td>
<td>15%</td>
<td>49%</td>
<td>9%</td>
<td>51%</td>
</tr>
<tr>
<td>Outdoor dew</td>
<td>14.4°C</td>
<td>4.5°C</td>
<td>14.4°C</td>
<td>4.5°C</td>
<td>14.4°C</td>
<td>3.0°C</td>
<td>14.4°C</td>
</tr>
<tr>
<td></td>
<td>61.9°F</td>
<td>49.1°F</td>
<td>61.9°F</td>
<td>48.1°F</td>
<td>61.9°F</td>
<td>37.4°F</td>
<td>61.9°F</td>
</tr>
<tr>
<td>Outdoor heatindex</td>
<td>35.1°C</td>
<td>27.2°C</td>
<td>35.1°C</td>
<td>24.9°C</td>
<td>42.4°C</td>
<td>22.9°F</td>
<td>42.4°F</td>
</tr>
<tr>
<td></td>
<td>95.2°F</td>
<td>81.0°F</td>
<td>95.2°F</td>
<td>76.8°F</td>
<td>109.0°F</td>
<td>73.0°F</td>
<td>109.0°F</td>
</tr>
<tr>
<td>Wind gust</td>
<td>1.3ms</td>
<td>0.8ms</td>
<td>1.3ms</td>
<td>0.8ms</td>
<td>1.3ms</td>
<td>0.8ms</td>
<td>1.3ms</td>
</tr>
<tr>
<td></td>
<td>2.0mph</td>
<td>0.8mph</td>
<td>2.0mph</td>
<td>0.8mph</td>
<td>2.0mph</td>
<td>0.8mph</td>
<td>2.0mph</td>
</tr>
<tr>
<td></td>
<td>80.2°F</td>
<td>80.2°F</td>
<td>80.2°F</td>
<td>80.2°F</td>
<td>80.2°F</td>
<td>80.2°F</td>
<td>80.2°F</td>
</tr>
<tr>
<td>Rain total</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
</tr>
<tr>
<td>Rain rate</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
<td>0.00mm/h</td>
</tr>
</tbody>
</table>

Figure 9
10. Weather Network

Weather Bridge provides some additional “push services”, which can send weather information via email, twitter, HTTP requests, FTP uploads, mysql queries or by implementing a user defined script.

All of these services can be triggered by certain alarm conditions, at a certain time of the day or in periodic intervals ranging from a few seconds to minutes or hours.

Configuring push services is done in two steps.

When you want to use a email, twitter, mysql or FTP you have to configure the basic authentication for these services fist.

Having configured the service, you can then define a specific event that uses one of the services.

For additional information on Push Services, please visit:

http://meteobridge.com/wiki/index.php/Push_Services

11. Services (Email, Twitter, http, ftp and mysql)

To upload the live data via email, twitter, http, ftp and mysql, select the Push Services tab.

WeatherBridge provides some additional “push services”, which can send weather information via email, twitter, HTTP requests, FTP uploads, mysql queries or by implementing a user defined script.

All of these services can be triggered by certain alarm conditions, at a certain time of the day or in periodic intervals ranging from a few seconds to minutes or hours.

Configuring push services is done in two steps.

When you want to use a email, twitter, mysql or FTP you have to configure the basic authentication for these services fist.

Having configured the service, you can then define a specific event that uses one of the services.

For additional information on Push Services, please visit:

http://meteobridge.com/wiki/index.php/Push_Services
12. Licensing

From the Menu tab, select **License**, as shown in Figure 12. Record the **License Key** for warranty purposes:

License Key (case sensitive):
13. Resetting the Nano for Lost IP Address, Passwords and Factory Reset

If the Nano LED continues to blink and does not remain on, press the small blue button on the Nano (Figure 1).

Press and hold the reset button and the LED will begin blinking. Let go to perform the following operations:

<table>
<thead>
<tr>
<th>Number of Blinks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before First Blink</td>
<td>If you have forgotten the Nano’s IP address, or it changed, the Nano will indicate it’s IP by a series of blink sequences. Please read: <a href="https://www.meteobridge.com/wiki/index.php/Getting_STARTED">https://www.meteobridge.com/wiki/index.php/Getting_STARTED</a> to decipher the <strong>IP Signaling</strong>.</td>
</tr>
<tr>
<td>1 Blink</td>
<td>If you have forgotten the Nano’s Wireless Access Point (WAP) password, the Nano will reset it’s WAP password. The default password is <strong>meteobridge</strong>. The Nano will reboot.</td>
</tr>
<tr>
<td>2 Blinks</td>
<td>Resets Nano’s login password to <strong>meteobridge</strong> and reboots.</td>
</tr>
<tr>
<td>5 Blinks</td>
<td>Resets Nano to factory default (all settings are lost) and reboots.</td>
</tr>
</tbody>
</table>
14. **Automatic Software Updates**
The Nano will automatically update to the latest application stack after each reboot.

15. **Hardware Specifications**
- Size: 35mm x 30mm x 20mm (width x height x depth)
- Weight: 10g
- Operating temperature: 0 - 50°C, non-condensing
- Power consumption: max 300 mA / 4.2 V
- WiFi 2.4 Ghz, 802.11g/n
- Reset button
- VoCore2 CPU board
  - Signal LED
  - 16 MB flash / 128 MB RAM
  - Mediatek 7628 AN SOC
  - Internal chip antenna

16. **More Information**
MeteoBridge is a Copyright of smartbedded UG (haftungsbeschränkt), all rights reserved. Please visit [www.MeteoBridge.com](http://www.MeteoBridge.com) for online documentation which will give more detail on features and lately added functions.

Note: WeatherBridge can only handle one weather station at a time. Parallel use of multiple weather stations is not supported.

**Questions or comments about this manual?** We are always striving to improve our documentation. Please send your comments to support@ambientweather.com.

17. **Liability Disclaimer**
The electrical and electronic wastes contain hazardous substances. Disposal of electronic waste in wild country and/or in unauthorized grounds strongly damages the environment.

Reading the “User manual” is highly recommended. The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.

This product is designed for personal use as indication of weather conditions. This product is not to be used for medical purposes or for public information.

The specifications of this product may change without prior notice.

This product is not a toy. Keep out of the reach of children.

No part of this manual may be reproduced without written authorization of the manufacturer.

Ambient, LLC WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR
18. Warranty Information

Ambient, LLC provides a 1-year limited warranty on this product against manufacturing defects in materials and workmanship.

This limited warranty begins on the original date of purchase, is valid only on products purchased and only to the original purchaser of this product. To receive warranty service, the purchaser must contact Ambient, LLC for problem determination and service procedures.

Warranty service can only be performed by Ambient, LLC. The original dated bill of sale must be presented upon request as proof of purchase to Ambient, LLC.

Your Ambient, LLC warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (lack of reasonable and necessary maintenance); (2) damage resulting from failure to follow instructions contained in your owner’s manual; (3) damage resulting from the performance of repairs or alterations by someone other than an authorized Ambient, LLC authorized service center; (4) units used for other than home use (5) applications and uses that this product was not intended.

This warranty covers only actual defects within the product itself, and does not cover the cost of installation or removal from a fixed installation, normal set-up or adjustments, claims based on misrepresentation by the seller or performance variations resulting from installation-related circumstances.