

TEMPO ANYWHERE INSTRUCTION GUIDE

Version 1.0.1



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Quick start

1. Create your account for Blue Maestro Cloud

This needs to be your first step since you need your account email and password to set up your Tempo Anywhere. Visit www.bluemaestro.com and then select “Cloud Sign In” at the very top of the screen. Then select create account. Once you have successfully created your account keep your email and password in a safe place.

2. Plug in your Tempo Anywhere into a power source

Simply plug your Tempo Anywhere into a power source. The SD card is already in the Tempo Anywhere.

3. From a computer or mobile connect to the WiFi “bluemaestrocloud”

The first time you turn on your Tempo Anywhere you need to provide it credentials to enable it to connect to the Blue Maestro Cloud and to be associated with your account. You do this by connecting to it via WiFi. From a computer or mobile, select the WiFi network “bluemaestrocloud”. If it asks for a password, the password is “bluemaestro” and the security protocol is WPA.

It may take a minute or two for the WiFi network “bluemaestrocloud” to become available from power-up of the Tempo Anywhere.

4. Open up the Tempo Anywhere web page in your browser

Once you have connected to the WiFi network “bluemaestrocloud” open up your web-browser and type in the search bar “<http://172.24.1.1:8080>”. This is the address of the web page running on the Tempo Anywhere that allows you to enter your credentials.

Once this page appears enter your WiFi SSID and password. This is the name of the WiFi that your Tempo Anywhere is going to use to connect to the Blue Maestro Cloud. SSID is essentially the name of the WiFi as you see it in your WiFi settings for your computer or mobile. The password is the password for the WiFi router. PLEASE TAKE CARE IN ENTERING THE SSID AND PASSWORD.

Enter your email and password for your Blue Maestro Cloud account. Again please take care in entering these details.

Once you are satisfied your details are correct, select the “Submit” button. Your Tempo Anywhere will now restart and will attempt to connect to the Blue Maestro Cloud. Please note once you hit “Submit” it may not be obvious anything has happened, but if you look at the available WiFi networks “bluemaestrocloud” should no longer appear since Tempo Anywhere is now connecting to the WiFi network you entered.

5. Log into your Blue Maestro Cloud account

If everything has gone smoothly if you log into your account your Tempo Anywhere should appear listed as a Gateway. Note, it may take a minute or two once you select the “Submit” button for your Tempo Anywhere to appear.

Introduction

Tempo Anywhere is a powerful internet gateway for your Blue Maestro Bluetooth Low Energy sensors and data loggers. It's hardware is based on a Raspberry Pi 3 Model B architecture running proprietary Blue Maestro scripts. As such it has onboard WiFi and Bluetooth 4.1 as well as a powerful Arm Cortex processor. It runs Linux at its core and is essentially a mini-computer.

What is included

1. RPI3 Model B electronic internals
2. A polycarbonate enclosure with rubber feet
3. A microUSB external power plug and adapters for most countries with a 1 meter length
4. A microUSB card incorporating firmware and custom scripts (usually already placed in-situ when shipping).

How to Set-Up

Tempo Anywhere does not have a power switch. It is powered-on as soon as it is plugged in to a mains power supply. Tempo Anywhere is designed to be always on, however it uses a highly efficient ARM Cortex chip meaning its power consumption is low.

In terms of where your Tempo Anywhere should be placed, it needs to be placed within Wi-Fi range of your router, and within Bluetooth Low Energy range of your Blue Maestro Bluetooth Low Energy sensors and data loggers. This is because Tempo Anywhere communicates with your router via Wi-Fi and with Bluetooth Low Energy devices using Bluetooth.

To determine where you are within range of your router and/or your Bluetooth Low Energy devices it is best to use your mobile phone as a guide. In your Wi-Fi settings it will show the relative radio strength of the Wi-Fi network that you want to connect Tempo Anywhere to. Ensure it is placed where the radio strength is good. Likewise use your smartphone to determine the placement of your Bluetooth Low Energy devices. Using a Utility App that displays the RSSI (the radio strength indicator) ensure that at your Tempo Anywhere the RSSI is a number greater than -100dBm (i.e., -80 to -98dBm is ideal).

Specifications

The following is the specification for your Tempo Anywhere.

ARCHITECTURE	ARMv8	WIFI	802.11n
SYSTEM ON CHIP	Broadcom BCM2835 1.2 Ghz 64-bit quad-core ARM Cortex A52	ETHERNET	10/100 Mbit/s Ethernet
MEMORY	512 MB onboard 16 GB external FLASH SD card	HARDWARE FEATURES	Polycarbonate external enclosure with rubber feet
PROCESSOR	ARM Cortex M4 32-bit	ROHS COMPLIANT	Yes
POWER	200 mA (1 W) from a 5 V via MircoUSB external power plug	DEVICE FIRMWARE UPGRADE	Over the air available
BLUETOOTH	Version 4.1	REGULATORY	EC compliant
		COUNTRY OF MANUFACTURE	United Kingdom

Compliance Information

Tempo Anywhere complies with the relevant provisions of the RoHS Directive for the European Union.

WEEE DIRECTIVE

In common with all Electronic and Electrical products Tempo Anywhere should not be disposed of in household waste. Alternative arrangements may apply in other jurisdictions.

The following EMC compliance standards are also met

European Union (EU) Electromagnetic Compatibility Directive - Compliance with Class B Information Technology Equipment according to the European Standard EN 55022

Federal Communications Commission (FCC) Emissions Compliance Statement - The equipment has been tested and complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions. (1) this device might not cause harmful interference, and (2) this device must accept any interference received, including interference that might cause undesired operation.

Warning: Operation of the equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

Industry Canada Class B Emissions Compliance Statement

The Class B digital apparatus complies with Canadian ICES-003.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum for lesser gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p) is not more than necessary for successful communication.

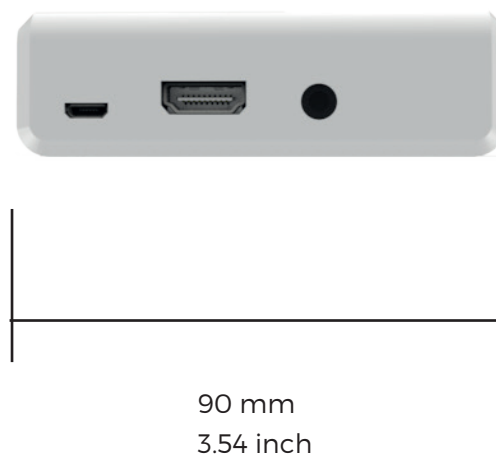
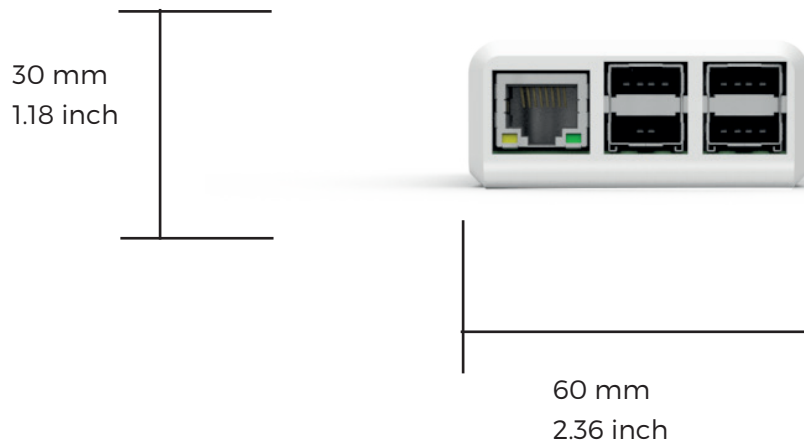
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Australia and New Zealand Class B Emissions Compliance Standards

Warning: This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Dimensions and form

The following represents the dimensions and form of the Tempo Anywhere Gateway for Bluetooth devices.



FAQS and Trouble Shooting Hints and Tips

1. What happens if I enter the wrong details into Tempo Anywhere

If you enter incorrect details such that Tempo Anywhere cannot connect to the internet or connect to Blue Maestro Cloud it will revert back to Access Point mode where you will be able to connect to its Wi-Fi and enter details again.

2. What do I do if I want to change the details in Tempo Anywhere

You are most likely want to do this if you want to change the Wi-Fi network that your Tempo Anywhere uses to connect to the Blue Maestro Cloud.

If you turn Tempo Anywhere off at the mains power and on again it will go into Access Point mode for approximately a minute where you are able to enter new details.

Once you turn on your Tempo Anywhere, connect to its Wi-Fi "bluemaestrocloud". Enter the access point URL : <http://172.24.1.1:8080>. Next select the Halt button to give yourself time to enter the new details. If you do not select the Halt button, after approximately 1 minute Tempo Anywhere will leave Access Point mode and will attempt to connect to the Blue Maestro Cloud. Therefore selecting the Halt Button is important if you are entering new details. PLEASE NOTE it is important that you connect to Tempo Anywhere's Wi-Fi, access the URL and hit the Halt button promptly. If you take too long doing this Tempo Anywhere will automatically finish the Access Point mode and will attempt to log into Blue Maestro Cloud with the details it already has.

3. Can I connect Tempo Anywhere to a Wi-Fi network that has a separate log-in screen?

This is common where the Wi-Fi network is free. In such cases the Wi-Fi network can be connected to without a password but there will be a log in screen that pops up in the browser where you enter your details (such as email address) to access the internet. You may have seen this in coffee shops, airports and the like.

Unfortunately Tempo Anywhere will not work on any Wi-Fi network that requires details to be entered into a browser to connect to the internet. That is because Tempo Anywhere does not have the ability to display such a web-page to enable those details to be entered.

4. My Bluetooth Low Energy devices are not appearing in my Blue Maestro Cloud dashboard

This is likely because Tempo Anywhere is not able to see the devices. The suggested method to set up your Tempo Anywhere initially is to have the Bluetooth Low Energy devices as close to the Tempo Anywhere as possible. Initially at least. As soon as the devices appear on your Blue Maestro Cloud dashboard you can begin to place them further away from your Tempo Anywhere. The ultimate range from your Tempo Anywhere is Bluetooth range, so about 75 meters/330 feet line of sight, but is reduced indoors or if obstructed. The best way to determine whether Tempo Anywhere will detect a particular Bluetooth Low Energy device is to place the device and then see if your smartphone will detect it at the location of the Tempo Anywhere. If the smartphone does, then generally the Tempo Anywhere gateway will to. However some trial and error may still be required.

