

## How to start to using WiFiLogger?

First step to run WiFiLogger is to connect it to your Wi-Fi network. You need to turn WiFiLogger internal none secure Wi-Fi network "WiFiLoggerSetup" (WiFiLogger will become an access point). Connect to this network and setup your home network parameters SSID(name) and password. WiFiLogger will become part of your home network and will reach access to the Internet.

White button – reset

Red button – setup

Yellow wire – eject tool, cotter, pull up to remove WiFiLogger from the console

### 1. Install it inside console like any other data logger:

- 1.1. Take the console nearby your router (same room).
- 1.2. Power off the console, remove battery.
- 1.3. Gently place WiFiLogger in an expansion port.
- 1.4. Power up the console.
- 1.5. Turn on the console using DONE button, while on screen is "RECEIVING FROM...".
- 1.6. Press reset (white button) on WiFiLogger, when console is working.

### 2. Enable none secure access point network:

- 2.1. Wait 20 seconds for WiFiLogger to turn it on.
- 2.2. Press and keep touching red button(setup) for about 3 seconds. Blue led should blink to confirm enabled of "SETUP MODE".
- 2.3. Try to find a new network "WiFiLoggerSetup" with your smartphone or laptop. If you can't find this network, please repeat point 2.1 and keep touching button a little longer, but not more than 15 seconds.
- 2.4. Connect to "WiFiLoggerSetup" network.
- 2.5. While your device (smartphone/laptop) is connected to WiFiLogger's network open web browser and try to open url address "HTTP://192.168.4.1"
- 2.6. First web page of WiFiLogger web interface should appear. Please navigate to SETUP -> WiFi Setup or open url address "HTTP://192.168.4.1/wifi.html"
- 2.7. Enable "AP Station", place name of your network in "SSID:" field and password "Password:" field. "AP" set to disable and "DHCP" to enable.
- 2.8. Please check if all fields are populated with proper data before pressing "SAVE".
- 2.9. Press "SAVE" button and wait for web page to be reloaded. If reloading takes more than 10 seconds, please reload it manually, or open url "HTTP://192.168.4.1/wifi.html" once more.
- 2.10. Below "SAVE" button there is a field named "Connection State:" please check if in this field text "CONNECTED" will appear. If text will be "IDLE", please repeat point 2.8, or restart WiFiLogger. Restart will disable "SETUP MODE", so you will have to go back to point 2.1.

2.11. If information “CONNECTED” will appear, navigate to SETUP -> Network Info. Check and remember/write it down IP number. Using this number you can have access from any computer at home to WiFiLogger.

2.12. Press reset button to disable “SETUP MODE”.

### 3. WiFi mode setup

WiFiLogger has three Wi-Fi mode B/G/N. Mode G & N has 54 Mbit/s data rate, mode B has 11Mbit/s. Important information is that all modes has different wireless parameters. N is best for modern WiFi network, but has very limited distance (in this particular device) same room where router is installed or next room. G has much bigger range, but for really good distance you should use B mode.

WiFiLogger parameters:

| Mode     | TX Power | Rx Sensitivity    |
|----------|----------|-------------------|
| 802.11 b | +20 dBm  | -91 dbm (11 Mbps) |
| 802.11 g | +17 dBm  | -75 dbm (54 Mbps) |
| 802.11 n | +14 dBm  | -72 dbm (MCS7)    |

WiFiLogger has manual setup for choosing Wi-Fi mode. Navigate to SETUP -> WiFi Setup please find “Wi-Fi Mode” field. You have to choose your option and press “SAVE” button, but to enable selected mode you will have to restart WiFiLogger. Wi-Fi mode is initiated during startup.

Networks are described by RSSI parameter.

If your network has RSSI not less than -50, you can use mode N.

For mode G RSSI should be bigger than -70. With mode B network with RSSI -80-85 can be reach.

For networks with RSSI less than -85 please consider to change console or router place to minimalize a distance.

#### Max TX pow:

This parameter is to limit output power of WiFiLogger radio. Radio power output has automatic adjustment, you can change it to reach the maximum distance. In normal use is an insignificant parameter.

### 4. NTP – Network Time Protocol

WiFiLogger has capability to synchronize console time with Internet time service. When you set interval bigger than 0, then WiFiLogger will repeat time synchronization in a set duration.

Also when NTP option is on, while powering up console WiFiLogger will download time from the Internet, set console time and enable console by exiting “RECEIVING FROM...” screen, but only when time was properly synchronized first.

### 5. TCP Port Settings

TCP port is part of network address. Network devices use two parameters to establish connection, IP address and port number (0 - 65535). In this field you can choose port number for communication with

other programs like original WeatherLink® 6.0, Cumulus, Weather Display etc.. Default is 22222 and should stay like this, but advanced user will find way to use this option with routers feature called port forwarding.

**Screenshots:**