

WiFi Pump I User Guide

:: WiFi Mode, Button Mode and Flash Mode ::

0, All the software and user guides are free downloads at web site: www.wenfree.com

1, If a custom procedure (Flash mode X) has been programmed into the control box by the WS10MS06 software, the system starts with Flash mode X after power on.

2, The Flash mode X could be erased by WS10MS06 software or by pressing down **S** key when plugged in power.

3, If the Flash mode X is stopped by pressing **■** button, the control box goes to Button mode (manual operation).

4, If there is no Flash mode X programmed, the control box will start with WiFi mode.

5, In WiFi mode the **▲ ▼ ■ S** 4 buttons are of no function. PC software takes control over the control box.

6, In WiFi mode the control box tries to connect to the WiFi AP. In case of success, the acquired IP address appears in the LCD display such as "192.168.0.108".

7, The WiFi connection may take from a few seconds to half a minute if the re-try happens.

8, Press the **M** button (Mode) to switch between WiFi mode and Button mode. The mode change can only be done when the pump does not run. In WiFi mode, the display shows the IP address and in Button mode the 0% power output and 0 rotation speed.

9, In Button mode, **▲** button is used to increase 5% power output, **▼** button to decrease 5% power output, **■** button to stop the pump. And 15% is the lowest power output.

10, When the pump rotates, the 16-char display shows: 1st char 'F' for forward rotation. 2~8th char for % power output. 9~16th char for RPM (Round Per Minute) rotation speed.

11, There are 9 built-in pre-defined pattern operation which is called Flash mode 1~9. In Button mode, press **S** button to enter the Flash mode.

12, In the Flash mode, use **S** button to select different Flash mode. The LCD display shows No. of mode in which the control box works. Pressing **■** button stops and leaves the Flash mode 1~9.

13, In Flash mode X and 1~9, **▲** button can lengthen the repeat cycle and **▼** button shorten the cycle. The last 2 char in the LCD display shows the speed. "0" means normal. Every "-1" shortens 25% of the previous cycle and every "+1" lengthens 33% of the previous cycle. The shortest is "-4" and the longest is "+4".

14, The pump and wires are submersible in water but the AC adaptor, control box, connector can't touch the water. The pump can only run in clean water or it might be damaged.

15, Do not run the pump in the air to high speed (>50% PWM). It might get damaged.

16, In WiFi mode if for any reason the control box loses the connection with WiFi AP during Pump's rotation, 30 seconds later the control box will stop the pump and tries to connect to WiFi AP again. If connected, wait for PC software's new instruction.

:: How to Connect the control box to a WiFi AP ::

For the very first time to connect to a WiFi access point:

1, Pressing **▲** button down when plugging in the DC power. The control box will search for available SSID around. The first SSID will be shown in the LCD display.

2, Press **▼** button until the right SSID appears. Press **S** button to select.

3, Next enter the password. Use **▲** button for upward char change, **▼** button for downward char change to go through space, 0~9, a~z, A~Z circularly (space char is no use). Use **■** button to confirm and move right to next char. Press **S** button to complete the password and start WiFi connection.

4, In case of success, the IP address appears in the LCD display. The control box will memorize and automatically apply the SSID and password next power-on.

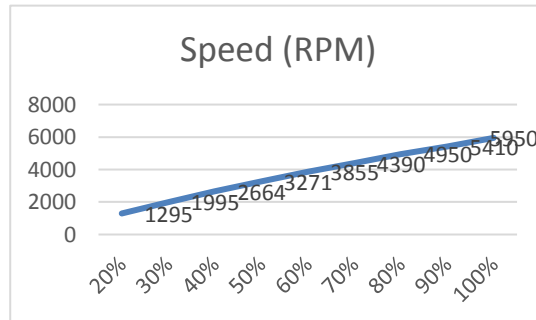
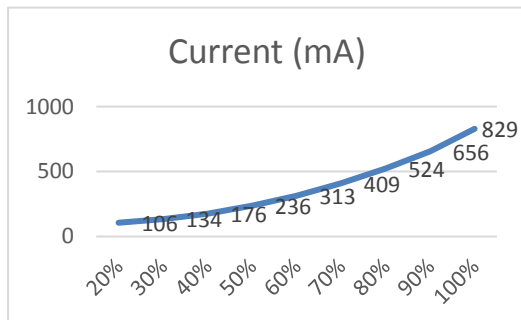
:: Product Specification ::

AC Adaptor: Input 100~240V 50/60Hz 0.4A, output DC 12V 1.5A, over-current shutdown protection

Control box: Input DC 12V, output 4-wire connector (3 pins used)

Pump: Sensor-less BLDC pump with side inlet, up outlet and U,V,W 3 wires (also a spray nozzle)

The below is a rough current and speed chart for reference (pump submersed in water).



Current consumption and rotation speed varies because of AC adaptor voltage drift and device precision inside the control box. Therefore, +/-10% is possible.

One-year warranty from the date of purchase, does not cover misuse, accident and abuse.

WiFi 水邦浦 I 使用說明

:: WiFi 模式、按鍵模式和 Flash 模式 ::

0, 所有的軟體和使用手冊都可以在網頁 www.wenfree.com 自由下載。

1, 如果控制盒曾經被軟體 WS10MS06 燒入一個客製化的控制程序 (Flash mode X), 在插入電源後控制盒會直接執行 Flash mode X。

2, 要抹除 Flash mode X 可以使用軟體 WS10MS06, 或按住 S 鍵時插入電源。

3, 如果按 ■ 鍵來終止 Flash mode X, 控制盒會進入按鍵模式 (手動操作)。

4, 如果電源插入時沒有 Flash mode X, 控制盒會以 WiFi 模式起始。

5, 在 WiFi 模式底下 ▲ ▼ ■ S 這四個按鍵沒有任何功能。此時電腦上的軟體可以掌控此控制盒。

6, 在 WiFi 模式底下控制盒會嘗試去連接 WiFi 分享器。假使成功, 從分享器獲取的 IP 位址會出現在 LCD 顯示螢幕上, 樣子就像 "192.168.0.108".

7, 與 WiFi 分享器連接的時間可能需要幾秒到半分鐘, 如果發生 re-try 的情況會長一點。

8, 按 M 鍵 (Mode) 可以在 WiFi 模式和按鍵模式間切換。但是只能在水邦浦停止轉動時, 才能切換模式。在 WiFi 模式下, 螢幕顯示 IP 位址。在按鍵模式下, 則是顯示 0% 輸出出力 and 0 RPM 旋轉轉速。

9, 在按鍵模式底下, ▲ 按鍵是用來增加 5% 的輸出出力, ▼ 鍵是用來減少 5% 的輸出出力, ■ 鍵用來使水邦浦停止轉動。最低轉速是在 15% 輸出出力。

10, 當水邦浦轉動時, 16 個字元的螢幕顯示: 第一個字元 'F' 代表順向轉動。第 2~8 字元是幾% 的輸出出力。第 9~16 字元則是 RPM (每分鐘幾轉) 轉動速度。

11, 控制盒中有內建事先定義的 9 種工作模式, 叫做 Flash mode 1~9。在按鍵模式底下, 按 S 鍵來進入 Flash mode。

12, 在 Flash mode 時, 按 S 鍵可以切換不同的 Flash mode。LCD 顯示螢幕會出現控制盒正在工作的 Flash mode 編號。按下 ■ 鍵會中止並離開 Flash mode 1~9。

13, 在 Flash mode X 或 1~9 下, 按 ▲ 鍵可以加長反覆顯示的週期時間, 而按 ▼ 鍵則可以縮短週期時間。LCD 顯示螢幕的最後兩個字元用來顯示速度。"0" 代表正常。每一次 "-1" 會縮短 25% 原先的週期。每一次 "+1" 會加長 33% 原先的週期。最短是 "-4" 而最長是 "+4"。

14, 水邦浦和接線可以沉於水, 但是交流變壓器、控制盒、接頭則不能碰到水。水邦浦只能在乾淨的水中工作否則可能因累積髒物而受損。

15, 不要讓水邦浦在空氣中轉至高速 (>50% PWM)。水邦浦有可能會受損。

16, 在 WiFi 模式下, 當水邦浦旋轉時, 如果因為任何原因控制盒失去與 WiFi 分享器的連線, 30 秒後水邦浦會停下來, 控制盒會重新與 WiFi 分享器連線, 如果連上, 控制盒將會靜待電腦軟體的新指示。

:: 如何連接控制盒到 WiFi 分享器 ::

最初第一次要連接 WiFi 分享器:

1, 接入控制盒直流電源時, 按住 ▲ 鍵。控制盒會尋找附近的分享器 SSID。第一個 SSID 將會出現在 LCD 顯示中。

2, 按 ▼ 鍵直到正確的 SSID 出現。按 S 鍵來確認選擇。

3, 接下來輸入密碼。使用 ▲ 鍵往上挑選字元, ▼ 鍵往下挑選字元, 字元以空白鍵, 0~9, a~z, A~Z 循環順序出現 (空白鍵為無用)。使用 ■ 鍵來確認並右移到下一個字元。完成密碼輸入後, 按 S 鍵來確認選擇, 並開始 WiFi 連接。

4, 如果連接成功, IP 位址將會出現顯示幕中。控制盒會記憶, 並且在下次電源重開時, 自動應用 SSID 和密碼來連接。

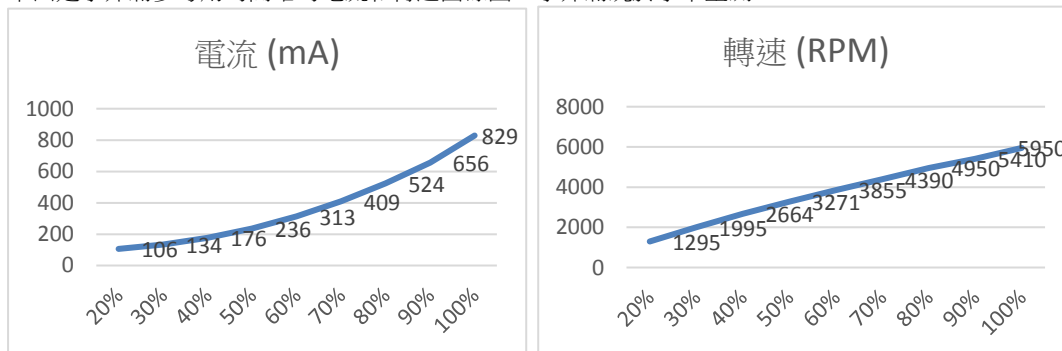
:: 產品規格 ::

交流變壓器: 輸入 100~240V 50/60Hz 0.4A, 輸出 DC 12V 1.5A, over-current shutdown protection

控制盒: 輸入 DC 12V, 輸出 4-wire connector (3 pins used)

水邦浦: 具有側面進水、上面出水和 U,V,W 3 接線的無感測直流無刷水邦浦 (附有一個噴嘴)

下面是水邦浦參考用的簡略的電流和轉速曲線圖 (水邦浦沉於水中量測)



消耗電流和旋轉速度之值會因為交流變壓器的輸出電壓漂移或控制盒中元件精準度不同而有所差異。因此, +-15% 的誤差是可能的。

從購買之日開始, 一年保固保證, 但不包含誤用、意外或濫用。