微電腦蠕動補水器 CS094A-1
MICOM DOSING ATO
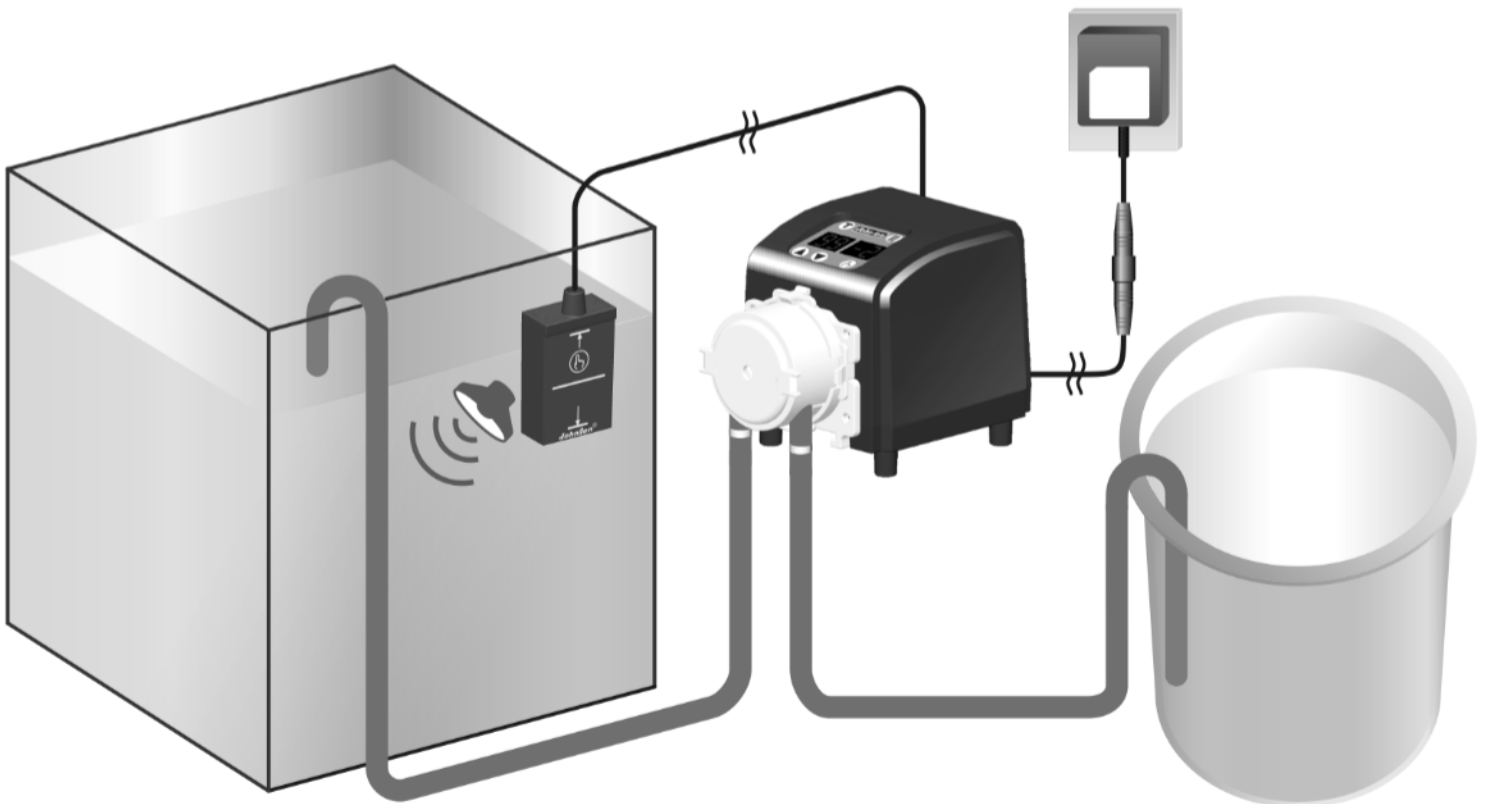
特點

1. 微控制器穿透型液位感測器偵測高低水位予以顏色指示和警報。

2. 預防不正常情況發生時，補水時間可調整於5分 ～ 9時。

Features

1. Color & Alarm the Hi-low liquid level by MCU thru-wall type level sensor .

2. Adjustable dosing time 5min ～ 9h against any abnormal situation .

親愛的客戶:
感謝您購買本產品,為安全使用和取得最佳性能,請詳細閱讀下列說明:

Dear customer:
We appreciate you purchase this product, in order to ensure your safety and gain the perfect functions, please read the following illustration.
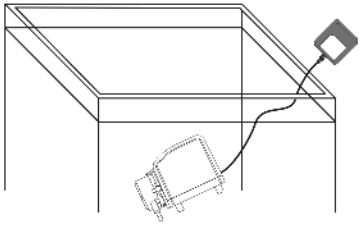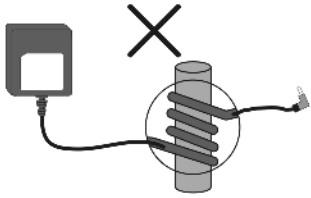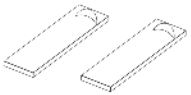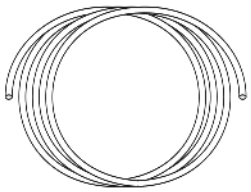
● 勿使本體落入水中，以免電子零件受損以致短路。

● Avoid the main-body falling into the water, don't risk the electronic components causing a short circuit.

● 避免電源供應器的電線受到刮傷凹折，尤其是電線尾端針頭處。

● Avoid switching power supply being scraped and concaved, especially the pinpoint on the end of wire.

● 請勿將電源供應器的電線纏繞在其他物體上。

● Don't tie switching power supply on other articles.

附件   ACCESSORIES

● 雙面膠帶 – 2片。

● Double-sided adhesive tape - 2 Pcs.

● 橡膠管 – 3米。
內徑：4.8毫米，
外徑：8.0毫米。

● Rubber hose - 3m.
Inside diameter: 4.8mm,
outside diameter: 8.0mm.

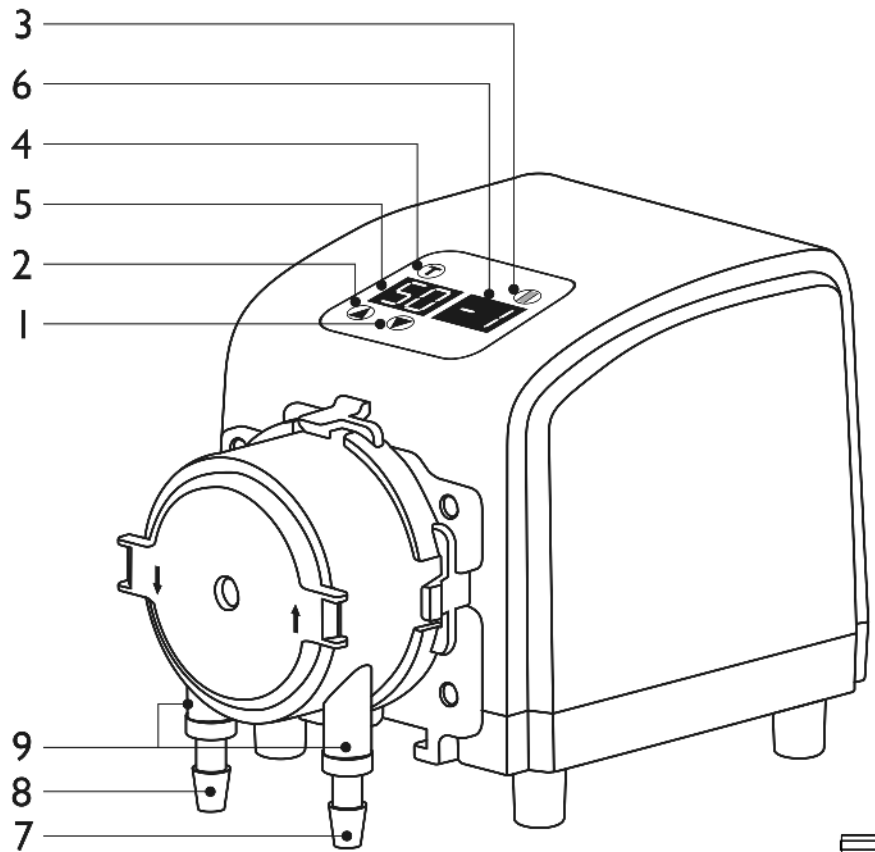● 電源供應器 – 1組。
輸入：全電壓電源
(100V～240VAC)。
輸出：dc 12V 1000mA。

● Switching power supply - 1 set.
Input: Universal power supply
(100～240VAC).
Output: dc 12V 1000mA.

● 液位感測器 – 1組。

● The level sensor - 1 set.

# 各部名稱簡介

1. 減短補水時間設定鍵
2. 增長補水時間設定鍵
3. 橡膠管強迫佈滿流體與排氣鍵
4. 運作模式選擇鍵
5. 補水時間顯示器
6. 運作模式顯示器
7. 液體進料塑膠接頭
8. 液體出料塑膠接頭
9. 蠕動管
10. DC 12V電源插座
11. 液位感測器連接線
12. 懸吊口 X 2

PARTS NAMES

1. Decreasing dosing time setting button
2. Increasing dosing time setting button
3. Full of liquid & put air out button
4. Operation mode selecting button
5. Dosing time display
6. Operation mode display
7. Liquid entrance connector
8. Liquid exit connector
9. The peristaltic tube
10. DC 12V jack
11. The level sensor connecting line
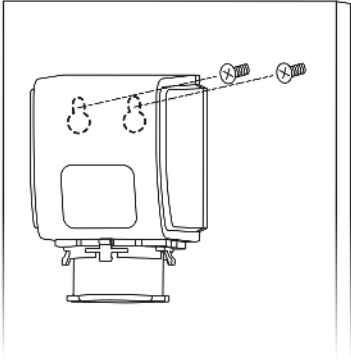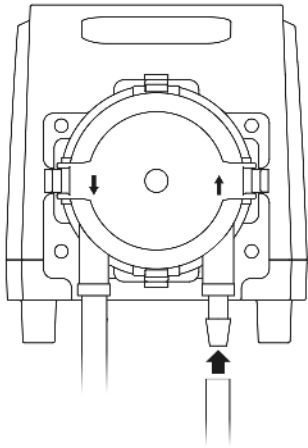12. Suspensible hole X 2
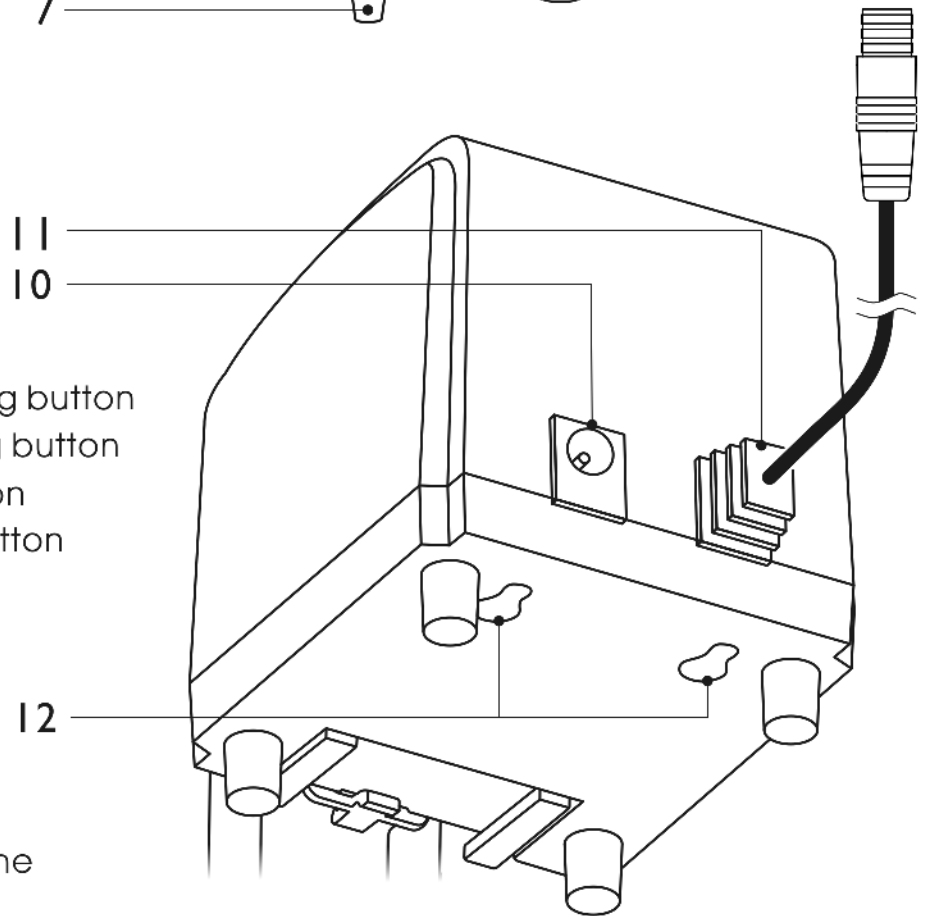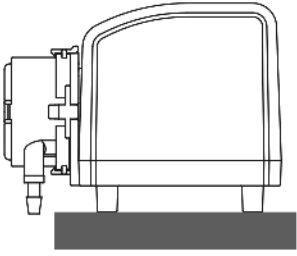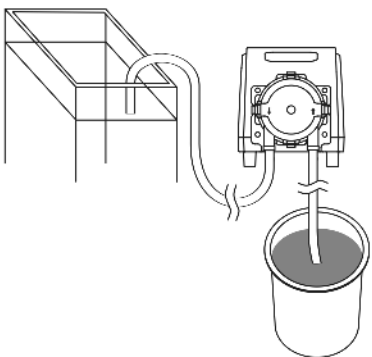
● 平放於桌面上。

● Put on the table.

● 懸掛於牆上。
將本體背部的懸吊口
掛在釘子上。

● Suspend on the wall.
Hang suspensible hole at the
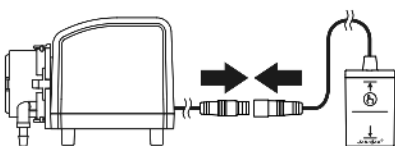rear of main body on the nail.

● 將橡膠管套入塑膠
接頭。
注意: 右進左出。

● Put the rubber hose onto
connector.
Attention: the right-in,
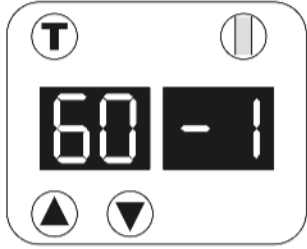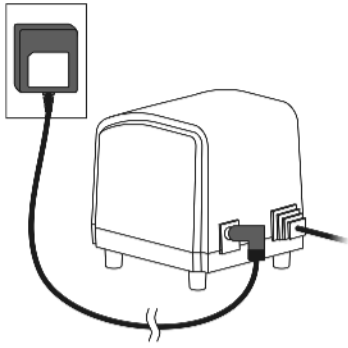the left-out.

● 將右側橡膠管插入
容器內(揚程約1.5米)
，左邊橡膠管放入
魚缸中(揚程約1.5米)。

● Insert the right side hose into the
vessel (Head around 1.5 meter),
and put the left side hose onto the
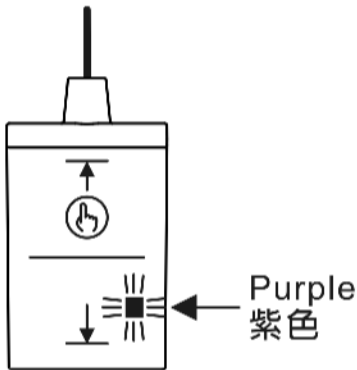tank (Head around 1.5 meter).
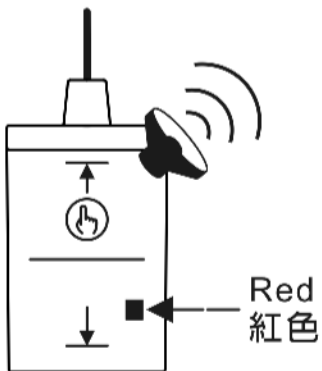
● 接上液位感測器。

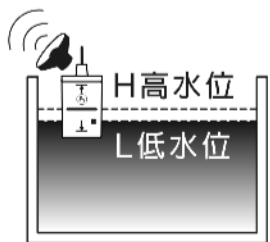● Connect the level sensor.

● 電源供應器插入ac電壓
插座，輸出端插入
dc 12V插座。

● Plug the ac adapter into the outlet,
plug the output into dc 12V jack.

● 數值 60 - 1 代表微電
腦記憶前次的設定數
值。表示運作模式選
擇 - 1 且補水時間設
定為 60 。

● Numerical value 60 - 1 is
representative of the previous
memory value set by microcomputer
,it means that operation mode be
selected - 1 and dosing time be set
60 .

Purple
紫色

● LED 閃爍紫色 8 次後。

● After the LED flashes with purple
color 8 times.

Red
紅色

● 跳至紅色並警報
聲 2 次。

● It skip to red color and alarm
resound twice.

H高水位
L低水位

● 而後每隔 6 秒警報
聲 2 次，表示液位
感測器處在低水位
狀態或置於空氣中。

● then alarm resound twice in every
6 seconds. it means that the level
sensor be positioned in a low level
state or placed in the air.
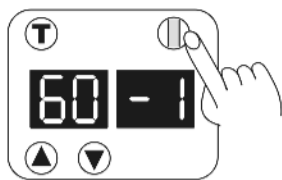
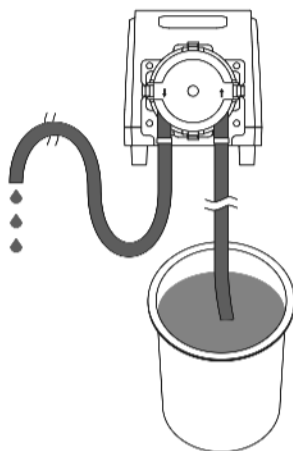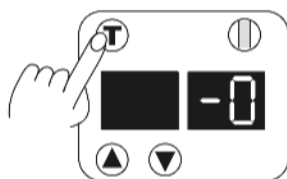- 欲管內強迫佈滿流體與排氣，請持續按 ⏸ 鍵。

- Intend forcing the inside of hose being full of liquid and putting air out, please continually press ⏸ button.

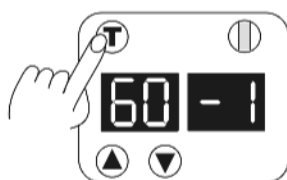- 將管內氣體排出，使左右兩邊橡膠管佈滿液體後才離開按鍵。

- Put the air which in side of hose out, when both side of hose be full of liquid and then left the button.

LED顯示 **-0**：
表示本機蠕動幫浦不會補水運轉。

The LED indicates **-0**:
it means that the dosing pump would not run ATO.

LED顯示 **-1**：
表示本機蠕動幫浦進入自動補水功能。

The LED indicates **-1**:
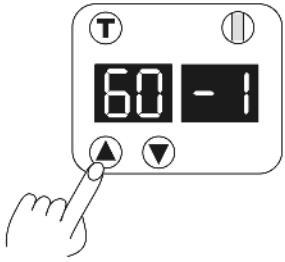it means that the dosing pump enter the function of running ATO.

責任保證

Limited Warranty

●按 ▲ 鍵則增加補水時間(最多9小時),從60分→…→90分→2小時→3小時→…→9小時。

● Press ▲ button to increase the dosing time(maximum 9 hours), from 60min→…→90min→2H→3H →…→9H.
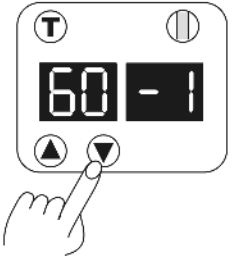
●按 ▼ 鍵則減少補水時間(最少5分鐘),從60分→50分→…→10分→5分。

● Press ▼ button to decrease the dosing time(minimum 5 min), from 60min→50min→…→10min→5min.

設定補水時間

SET THE DOSING TIME

H高水位
1cm
L低水位

●計算出補水量:
　1.容器尺寸
　　(長×寬×高):
　　60×30×30公分。
　2.補水量:
　　60×30×1公分/1000
　　=1.8公升。
　(1公分為高低水位差值
　,此值視容器之不同材
　質及厚度而有所不同)。

● Count dosing dosage:
　1.Vessel dimensions
　　(L×W×H):
　　60×30×30cm.
　2.Dosing dosage:
　　60×30×1cm/1000
　　=1.8 liters.
　　(Level difference 1 cm depends on the different material and thickness of vessel).
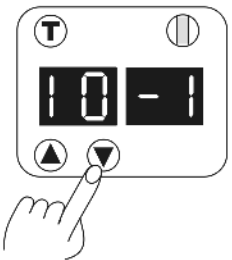
●決定補水時間:
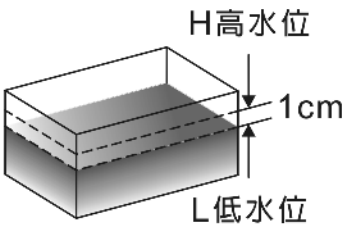　1.本機器補水量為
　　20公升/60分
　　=0.33公升/分。
　2.故補水時間須
　　1.8公升/(0.33公升/分)
　　=5.45分。
　3.最後決定補水時間為
　　時間依設定在10分,
　　其他設定此類推。

●Decide dosing time:
　1.The machine dose dosage up to
　　20 liters/60 minutes
　　=0.33 liters/min.
　2.So the dosing time shall be
　　1.8 liters/(0.33 liters/min)
　　=5.45 minutes.
　3.The final decision on the dosing time is setting at 10 minutes, and so on.

●將液位感測器安裝在乾淨
的玻璃或塑膠容器外壁。

● Put the level sensor to install on
a clean surface of glass or
plastic vessel.

●附著是由雙面膠帶粘接
完成。

● Attachment is done by
double-sided adhesive tape.

●容器壁厚度可以 2～15
mm。

● Thickness of the vessel wall can
be 2～15 mm.

H高水位

1.決定高水位。

1.Decide the high liquid level.
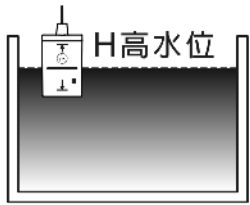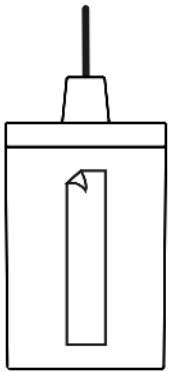
2.先將雙面膠帶的一面
離形紙撕開後，黏貼
於液位感測器的背面。

2.Peel off the protective paper
of double-sided adhesive
tape, attach the rear of main
body of the level sensor.

H高水位

3.將液位感測器之白色
中線對準高水位後，
再將雙面膠帶的另面
離形紙撕開並將感測
器粘貼在容器外壁上。

3.After the white centerline of
level sensor aim at the high
liquid level, peel off the other
side of protective paper of
double-sided adhesive tape
and attach the level sensor
on the outer wall of vessel.

4.手按 🖐 鍵約 2 秒後 LED
會閃爍藍色。

4. Press 🖐 button about 2
seconds and then LED flashes
with blue color.
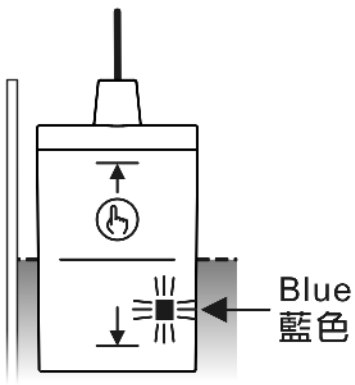
Blue
藍色

5.手離開 ⟨👆⟩ 鍵後 LED 會
閃爍藍色約 10 次再跳
至藍色。

Blue
藍色

5.After left ⟨👆⟩ button, LED flashes
with blue color about 10 times
and then skip to blue color.

6.LED 跳至藍色，表示
高水位定位完成且
不會有補水動作。

H高水位
Blue
藍色

6.LED skip to blue color, it means
that the high liquid level be
positioned and do not have an
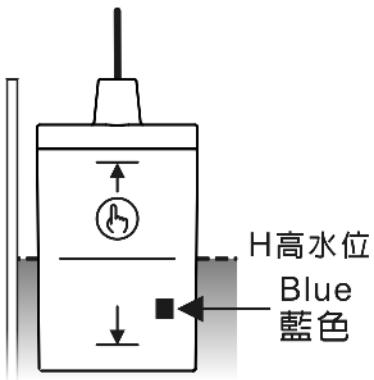dosing action.
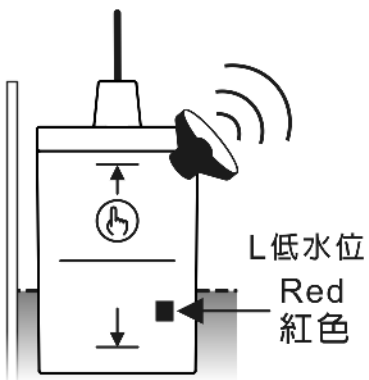
7.當水位下降至低水位
時，LED 跳至紅色並
警報聲 2 次才開始有
補水。

L低水位
Red
紅色

7.When the liquid level drops to
the low liquid level, LEDskip to
red color and alarm resound
twice and then start dosing
dosage.
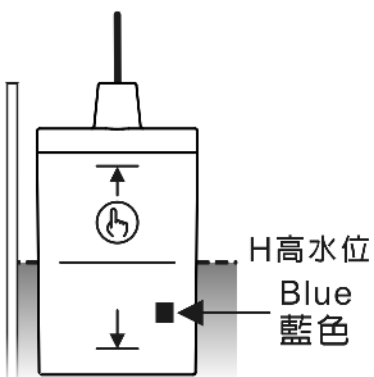
8.當水位上升至高水位
時，LED 跳至藍色且
截止補水。

H高水位
Blue
藍色

8.When the liquid level rises up
the high liquid level, LED skip to
blue color and stop dosing
dosage.

● 蠕動管與馬達是消耗品，必須
定期更換。
蠕動管：運轉 2000 小時後必須
更換，如果有重度運
轉時，則視情況縮短
更換時間。
馬達：運轉 2000 小時後必須更
換，如果有重度運轉時，
則視情況縮短更換時間。

註：蠕動管或馬達損壞需更換
整組蠕動幫浦。

● The peristaltic tube and the motor are consumable
parts and need to be replaced regularly.
Tube: After a running time of around 2000 hours ,the
tube needs replacement. if the tube under
heavy use conditions, the tube should be
shortened the regular time.
Motor: After a running time of around 2000 hours,
the motor needs replacement. If the motor
under heavy use conditions, the motor
should be shortened the regular time.
Note: the peristaltic tube and motor are damaged
that should replace the entire of dosing pump.

● 型號：**CS094A-1**
輸入：全電壓電源
(100V～240VAC)。
輸出：DC 12V 1000mA。
⊖──●──⊕
功率(幫浦運轉時)：4.8W。
液量：20公升／小時。
尺寸(寬×高×深)：
主機：78×88×130 mm。
感測器：36×65×18 mm。
重量(含包裝盒)：700 g。

● 注意：
上列數據皆為近似參考值，規格
若有變化，恕不另行通知。

● **Model: CS094A-1**
Input: Universal power supply
(100V～240VAC)
Output: DC 12V 1000mA
⊖──●──⊕
Wattage(when pump running): 4.8W
Dosage: 20 liter/hour
Measurement(WxHxD):
Main body: 78×88×130 mm
Sensor: 36×65×18 mm
Weight(packaged): 700 g

● **ATTENTION:**
Above data are approximate reference value, it
wouldn't be advised if the specification being
changed.