

微電腦自動加液器

MICOM LIQUID FEEDER

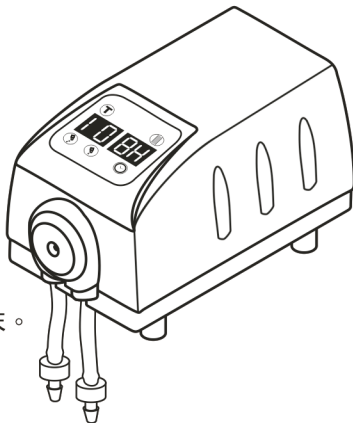
說明書/保證書
DIRECTIONS/GUARANTEE

CS072A-1 附電源供應器組 Switching power supply set attached

CS072A-2 附連接線組 DC jack connected wire set attached

特點

1. 微電腦控制，操作最簡便。
2. 可微調出量，極致技術。
3. 給料次數24次/天 ~ 1次/9天。
4. 液量1ml ~ 99ml。
5. LED字幕，顯而易見。



Features

1. Micro-computer single-chip controlled, simply operate.
2. Unique micro-adjusting device on dosage.
3. Intelligent dosing time. 24 times/day ~ 1 time/9 days.
4. 1 ml to 99 ml dosage as set.
5. Bright LED display, easily visible.

責任保證

在正常用途及服務下，從購買日算起12個月，對產品零件或製造所產生瑕疵做保證。此保證僅限於本機體，機體外的損失非在保障權限之內，請退回您當地的經銷商修理或替換。

Limited Warranty

Under normal use and service, all appliances carry 12 months warranty from the date of purchase on parts and labor against manufacturing defects. Please return the unit if deemed defective to your local dealer for repair or replacement. The warranty is limited to this appliance only, Not responsible for consequential loss or damage.

經銷店章 Sealed By Store

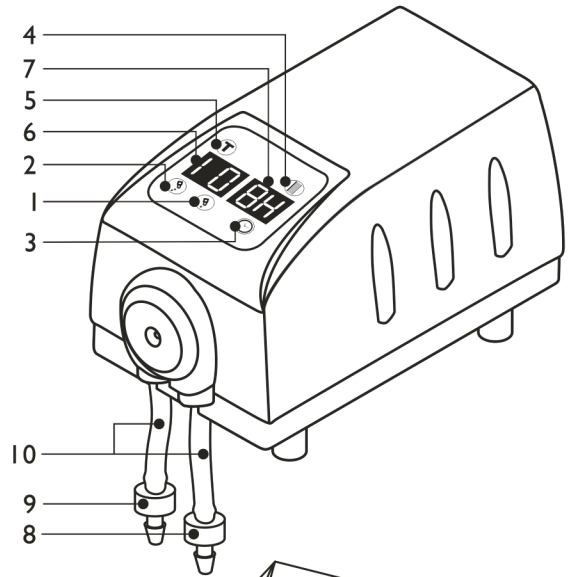
購買日期 Date Purchased ____/____/____

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.

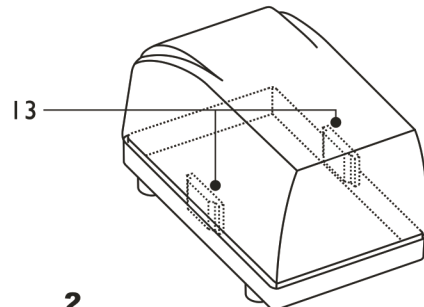
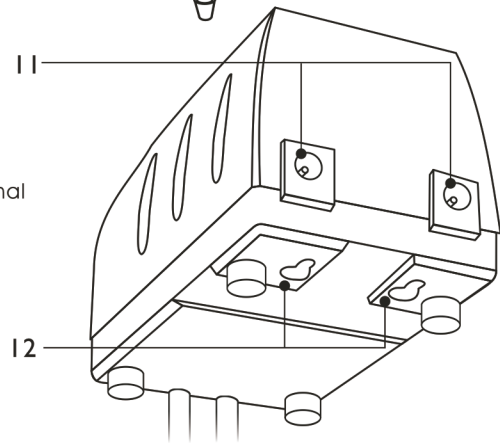
各部名稱簡介

1. 液量設定鍵 - 個位數
2. 液量設定鍵 - 十位數
3. 時間設定鍵 - 每間隔
4. 橡膠管強迫佈滿流體與排氣鍵
5. 微調出量測試鍵
6. 液量設定顯示器
7. 時間設定顯示器
8. 液體進料塑膠接頭
9. 液體出料塑膠接頭
10. 橡膠管 - 可替換
11. dc 12V 電源插座 X 2
12. 懸吊口 X 2
13. 磁鐵 X 2

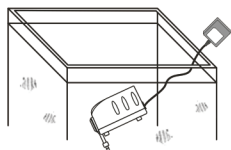


PARTS NAMES

1. Liquid volume setting button - unit
2. Liquid volume setting button - decimal
3. Time-setting button - every intervals
4. Full of liquid & put air out button
5. Micro-adjusting dosage test button
6. Liquid volume setting display
7. Time setting display
8. Liquid entrance connector
9. Liquid exit connector
10. Rubber hose - replaceable
11. dc 12V jack X 2
12. Suspensible hole X 2
13. Magnet X 2



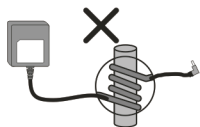
注意事項



- 勿使本體落入水中，以免電子零件受損以致短路。

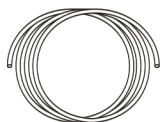


- 避免電源供應器的電線受到刮傷凹折，尤其是電線尾端針頭處。

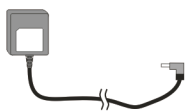


- 請勿將電源供應器的電線纏繞在其他物體上。

附件



- 橡膠管 - 3米。
內徑: 2.6毫米，
外徑: 4.9毫米。

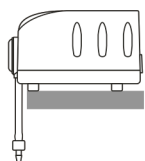


- 電源供應器 - 1組。
(附屬於型號 CS072A-1)
輸入: 詳見標示貼紙，
輸出: dc 12V 1000mA。
⊖ — ● — ⊕

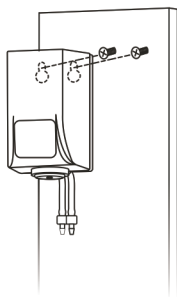


- DC插座連接線 - 1組。
(附屬於型號 CS072A-2)

安裝方式



- 平放於桌面上。



- 懸掛於牆上。
將本體背部的懸吊口掛在釘子上。

CAUTION

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

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

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

ACCESSORIES

- Rubber hose - 3m.
Inside diameter: 2.6mm,
outside diameter: 4.9mm.

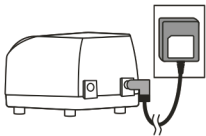
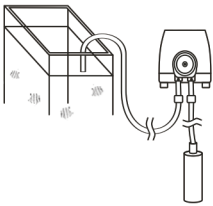
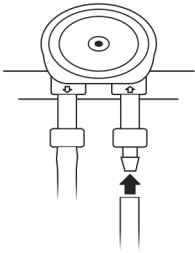
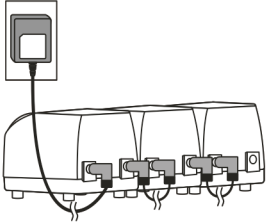
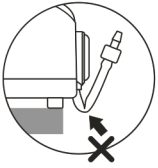
- Switching power supply - 1 set.
(Attached to model CS072A-1)
Input: Look at a mark label,
Output: dc 12V 1000mA.
⊖ — ● — ⊕

- DC jack connected wire - 1 set.
(Attached to model CS072A-2)

INSTALLATION

- Put on the table.

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



- 橡膠管避免凹折，否則會阻塞液體流動。

- Avoid rubber hose being bent as a concave, otherwise it will block up the flowing liquid.

- 利用本體二側的磁力相吸，最多可以3台並排擺放。

- Use the magnetic attraction on both sides of main body. Up to three units placed side by side.

- 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.

- 將右側橡膠管插入液體容器內(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).

電源操作

- 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.

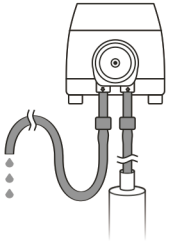
- 數值 **10 8H** 代表微電腦記憶前次的設定數值。表示每隔8小時後會自動給料10ml。

- Numerical value **10 8H** is representative of the previous memory value set by microcomputer, it means that after every 8 hours would automatically dose 10 ml dosage.

設定鍵操作

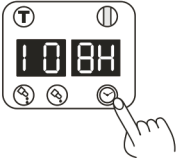


- 欲管內強迫佈滿液體與排氣，請持續按 (I) 鍵。

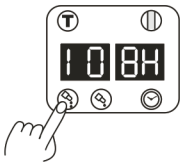


- 將管內氣體排出，使左右兩邊橡膠管佈滿液體後才離開按鍵。

注意：補充新液換新瓶時，此道程序必做。



- 設定液體給料時間請按時間設定鍵 (C)，每按一下，LED 將從 1H → 2H → 3H → 4H → 6H → 8H → Hd (12H) → 1d → 2d → 3d → 4d → 5d → 6d → 7d → 8d → 9d 循環指示。LED 顯示 8H 表示從按 (C) 鍵動作開始 8 小時後，本機蠕動幫浦會開始轉動以便給料，往後每循環 8 小時會自動給料運作，其他設定時間依此類推。



- 設定液體給料數量請按液量設定鍵 (U) (個位數) 與 (D) (十位數)，設定範圍 1~99ml。

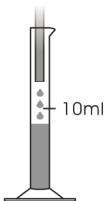
微調出量調整



- 請按微調出量測試鍵 (T) 持續 4 秒。



- LED 將顯示 **58 10**，左邊 **58** (可調整) 是蠕動幫浦運轉時間，右邊 **10** 是液體給料數量測試值。



- 2 秒後液體開始給料 10ml。

SETTING BUTTON OPERATION

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

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

Attention: Exchange a new vessel for a liquid supplement, this procedure must do.

- While setting the dosing time, please press the (C) button, the LED would cyclically indicate 1H → 2H → 3H → 4H → 6H → 8H → Hd (12H) → 1d → 2d → 3d → 4d → 5d → 6d → 7d → 8d → 9d at one touch. The LED indicate 8H means that passed 8 hours from a beginning action of the (C) press, the dosing pump would automatically dose a dosage, afterwards every 8 hours would automatically dose a dosage, and so on.

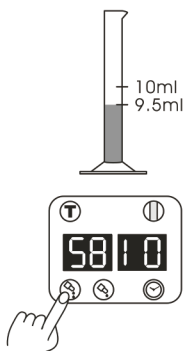
- While setting the dosage, please press the liquid volume setting button (U) (unit) and (D) button (decimal), setting range 1~99ml.

MICRO-ADJUSTING DOSAGE

- Please press continually the test button (T) for 4 seconds.

- Then the LED indicate **58 10**, left **58** (can be adjustable) was the running time of dosing pump, right **10** was the testing value of a dosage.

- After 2 seconds, start dosing 10ml dosage.

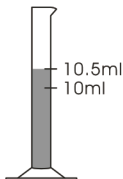


- 如果液量低於10ml，如 9.5ml。

- If dosage lower than 10 ml, for example 9.5 ml.

- 則按 鍵增加運轉時間，從58→59→60→61→... 重複測試至達到10ml為止。

- Then press the liquid volume setting button to increase the running time from 58→59→60→61→..., repeatedly test until up 10ml dosage.



- 如果液量高於10ml，如 10.5ml。

- If dosage higher than 10 ml, for example 10.5 ml.

- 則按 鍵減少運轉時間，從58→57→56→55→... 重複測試至達到10ml為止。

- Then press the liquid volume setting button to decrease the running time from 58→57→56→55→..., repeatedly test until down 10 ml dosage.

- 給料測試值完成後，按微調出量測試鍵 持續4秒則恢復正常功能。

- After finished test, press continually the test button for 4 seconds and then return to the normal function.

- LED顯示原來設定值 **10 8H**。

- LED indicate the original value of setting **10 8H** .

延遲模式操作

二至四台合併使用，當遇到停電且再通電的時候，延遲(5~55分)模式功能可避免同時給料。

DELAY MODE OPERATION

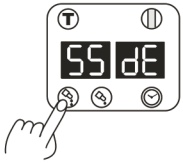
Used with 2~4 units, the function of delay (5~55min) mode should avoid dosing a dosage at the same time while encountering blackout and re-power.

- 請按時間設定鍵 持續4秒。

- Please press continually the time setting button for 4 seconds.

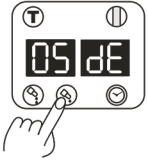
- LED將顯示 **00 DE**，**DE** 代表進入延遲模式，**00** 代表設定的給料時間會自動延遲0分。

- The LED indicate **00 DE** , **DE** means entering delay mode , **00** means that the dosing time of setting would automatically delay 0 minute.



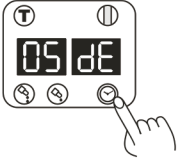
- 按 鍵則增加延遲時間，
從0→5→10→15→...→55
(每間隔5分)。

- Press button to increase the delay time
from 0→5→10→15→...→55
(every 5 min intervals).



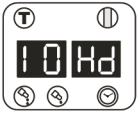
- 按 鍵則減少延遲時間，
從55→...→15→10→5→0
(每間隔5分)。

- Press button to decrease the delay
time from 55→...→15→10→5→0
(every 5 min intervals).



- 延遲模式設定完成後，再按
時間設定鍵 持續4秒則
恢復正常功能。

- After finished delay mode setting, press
again the time setting button for 4
seconds and then return to the normal
function.



- LED 顯示設定值 **10 Hd**。

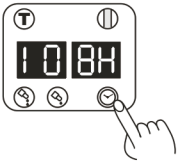
- LED indicate the value of setting **10 Hd** .

縮短時間測試

測試時間運轉功能是否正常

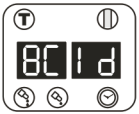
TEST FOR SHORTENING TIME

Test machine whether it normally function its running time.



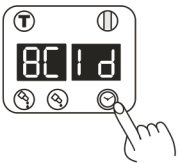
- 請按時間設定鍵 持續
8秒。

- Please press continually the time
setting button for 8 seconds.



- LED 將顯示 **8C 1d**，代表每隔
24秒(從1d=24小時縮短成
24秒)後會自動給料8cc (ml)，
如有液體給料表示此機器的
時間運轉功能正常。

- Then the LED indicate **8C 1d** means
that after every 24 seconds (Shorten
from 1d=24 hours into 24 seconds)
would automatically dose 8cc (ml)
dosage, if have dosed a dosage, it
means that this machine normally
function its running time.



- 縮短時間測試完成後，
再按時間設定鍵 持
續8秒則恢復正常功能。

- After finished test, press again the time
setting button for 8 seconds and
then return to the normal function.



- LED 顯示設定值 **10 Hd**。

- LED indicate the value of setting **10 Hd** .

保養

- 橡膠管與馬達是消耗品，必須定期更換。

橡膠管：運轉1000小時以後或給料次數約50000次以後橡膠管必須更換，如果有重度運轉時，則視情況縮短更換時間。

馬達：運轉800小時後更換馬達。

步驟如下：

1. 下蓋4支螺絲拆掉，打開上下蓋。
2. 拔開馬達接線上的連接器，取出蠕動幫浦組件。
3. 反向操作換上新的蠕動幫浦組件。

註：橡膠管或馬達損壞需更換整組蠕動幫浦。

MAINTENANCE

- The rubber hose and the motor are consumable parts and need to be maintained and replaced regularly.

Hose: The rubber hose has a running time of around 1000 hours or 50000 dosing times and after this usage, it needs replacement. If the rubber hose under heavy use conditions, the rubber hose should be shortened the regular time.

Motor: after a running time of around 800 hours, the motor needs replacement.

Replacing the motor as follows.

1. Unfasten the 4 screws in the back cover, open upper and back cover.
2. Pull the power cable connection out from the connector block and remove the dosing pump assembly.
3. To fit the new dosing pump assembly in reverse order.

Note: the rubber hose and motor are damaged that should replace the entire of dosing pump.

技術規格

- **型號：CS072A-1**

附電源供應器組

輸入：詳見標示貼紙

輸出：dc 12V 1000mA



幫浦運轉時全部消耗功率：2.2W

給料次數：24次/天~1次/9天

液量：1ml ~ 99ml

液量精度：<±3%

尺寸(寬x高x深)：67x71x113毫米

重量(含包裝盒)：430g

- **型號：CS072A-2**

附DC插座連接線組

重量(含包裝盒)：330g

備註：技術規格等與CS072A-1相同，惟連接線組與電源供應器組不同。

- **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。

TECHNICAL SPECIFICATIONS

- **Model: CS072A-1**

Switching power supply set attached

Input: Look at a mark label

Output: dc 12V 1000mA



Full Power consumption while pump running: 2.2W

Dosing time: 24 times/day ~ 1 time/9 days

Dosage: 1ml ~ 99ml

Dosage Accuracy: <±3%

Measurement (WxHxD) : 67x71x113mm

Weight (packaged) : 430g

- **Model: CS072A-2**

DC jack connected wire set attached

Weight (packaged) : 330g

PS: Tech-spec etc was the same as CS072A-1.

Only a connected wire set differ from a power supply set.

- **ATTENTION:**

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