

DP-102D

RS-232 to DMX Interface 【User Manual】



Lite-Puter Enterprise Co., Ltd

Website : www.liteputer.com.tw

E-mail : sales@liteputer.com.tw

INDEX

Chapter 1 System Introduction

1-1 Function introduction -----	2
1-2 Baud rate setting-----	3

Chapter 2 Function Setting

2-1 Setting dimming value of one channel-----	4
2-2 Setting dimming value of continuous channels (Each channel has same dimming value)-----	5
2-3 Setting dimming value of continuous channels (The channels have different dimming value)-----	6

Chapter 1 System Introduction

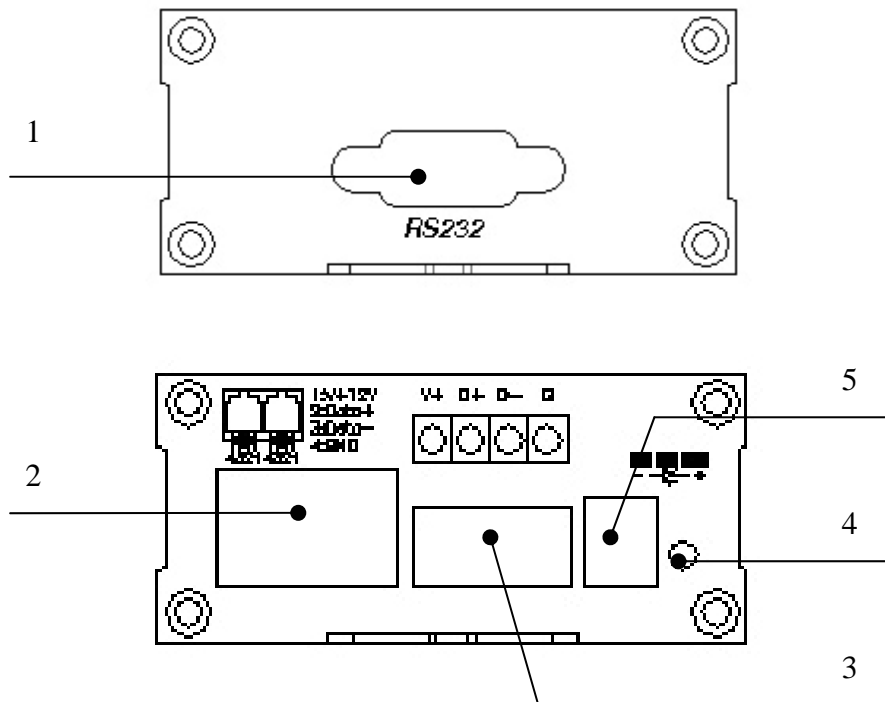
1-1 Function introduction

Function:

- Transfer RS-232 to DMX signal

Specifications:

- Power input : DC9-12V
- Signal input : RS-232
- Signal output : DMX-512
- Dimension : 133(W)*35(H)*76(D)mm
- Weight : 220g



1	RS-232 interface
2	DMX signal output : PHONE JACK RJ11
3	DMX signal output : Green terminal
4	Power indicator
5	Power input : DC 12V/1A

1-2 Baud rate setting

Baud rate setting : "19200, N, 8, 2"

19200 ---Baud rate

8 --- 8 data bits

2 --- 2 stop bits

When you use VB to program, please use the command as below,

MSComm1.Settings = "19200, N, 8, 2"

Chapter 2 Function Setting

2-1 Setting dimming value of one channel

Setting dimming value of one channel

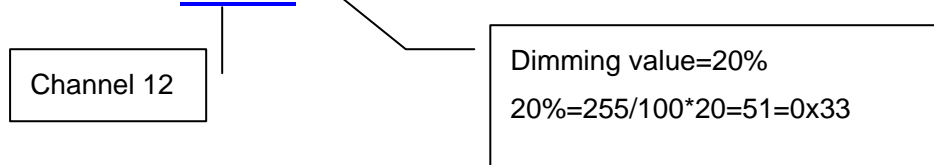
0H-11H-1H-~~Ard_High-Ard_Low-Value~~-0H-0H-5H

To set dimming value of DMX address 5 as 50% (80H), please use the command as below :

0H-11H-1H-~~0H-5H-80H~~-0H-0H-5H

To set dimming value of DMX address 12(0CH) as 20% (33H), please use the command as below :

0H-11H-1H-~~0H-0CH-33H~~-0H-0H-5H



Ard_High : DMX address MSB

Ard_Low : DMX address LSB

For example:

DMX Address= 278: Ard_High=01H , Ard_Low=17H

DMX Address= 20: Ard_High=0H , Ard_Low=14H

Value : dimming value

If the dimming value is 20%, the calculation method as below :

Change 20% to decimal system is $20/100*255=51$;

Change 51 to hexadecimal system is $51 \rightarrow 33H$

2-2 Setting dimming value of continuous channels (Each channel has the same dimming value)

Setting dimming value of continuous channels: Each channel has the same dimming value.

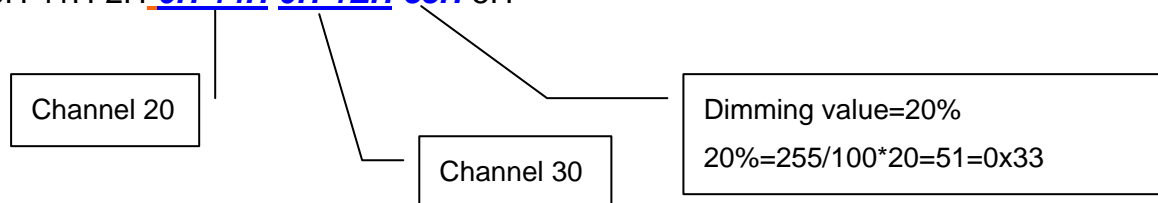
0H-11H-2H- *First_High-First_Low-End_High-End_Low-Value*-5H

To set dimming value of DMX address from 3 to 15 as 50% (80H), please use the command as below :

0H-11H-2H-*0H-03H-0H-FH-80H*-5H

To set dimming value of DMX address from 20 to 30 as 20% (33H), please use the command as below : :

0H-11H-2H-*0H-14H-0H-1EH-33H*-5H



First_High : DMX start address MSB

First_High : DMX last address MSB

First_Low : DMX start address LSB

First_Low : DMX last address LSB

Value : dimming value

For example: switch off all DMX address from 1 to 512, please use the command as below:

0H-11H-2H-*0H-1H-2H-0H-0H*-5H

2-3 Setting dimming value of continuous channels (The channels have different dimming value)

Setting dimming value of continuous channels : the channels have different dimming value.

0H-11H-3H-*Total CH-First_High-First_Low- CH1-CH2- CH3-*

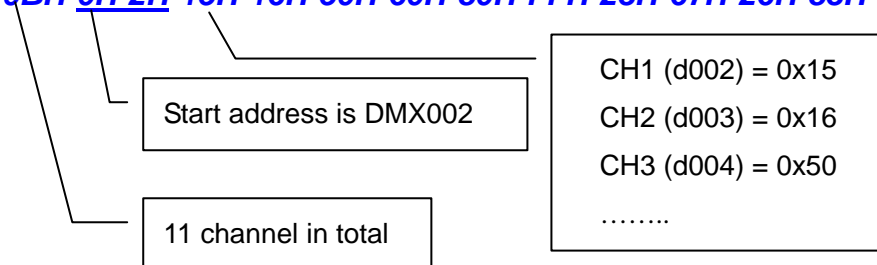
To set dimming value of DMX address from 3 to 6 as 10H,25H,32H,47H , please use the command as below :

0H-11H-3H-*4H-0H-03H-10H-25H-32H-47H*

To set dimming value of DMX address from 2 to 12 as

15H,16H,50H,60H,80H,EFH,FFH,23H,67H,26H,83H separately, please use the command as below : :

0H-11H-3H-*0BH-0H-2H-15H-16H-50H-60H-80H-FFH-23H-67H-26H-83H*



Total CH : total channel numbers in command

First_High : DMX start address MSB

First_Low : DMX start address LSB

CH1 : dimming value of start channel (start channel is DMX002 in this example)

CH2 : dimming value of second channel (second channel is DMX 003 in this example)

CH3 : dimming value of third channel (third channel is DMX 004 in this example)

Guarantee

Lite-Puter promises to fulfill the following acceptances:

1. Lite-Puter is only responsible for DP-102D itself.
2. Lite-Puter guarantees to keep Lite-Puter's fault products caused by techniques, materials and any other logical reasons in good repair for free within a year since the distributing date.
3. We do not offer door-visiting service. If the trouble appears in Lite-Puter's products, please deliver the equipment to local distributors or Taipei headquarter.

*** Special Statement***

Any fault caused by false usage, imprudence (collision or inadequate installation) or force majeure factors are not in Lite-Puter's service.

Revision Record

Version	Record
A	First version
B	Change typing error

Issued on: August, 2010

Lite-Puter

World Headquarter:

Lite Puter Enterprise Co., Ltd.

Address: 9F, No. 196, Sec. 3, Da Tung Rd., Shijr City, Taipei, Taiwan

Zip Code: 22103

Tel: +886-2-86472828

Fax: +886-2-86472727

Website: www.liteputer.com.tw

E-mail: sales@liteputer.com.tw

Shanghai Factory:

Lite Puter Technology (Shanghai) Co., Ltd.

Address: Building B5, No. 298, Lane 3509, Hongmei S. Road, Shanghai, China

Zip Code: 201108

Tel: +86-21-54408210

Fax: +86-21-64978079

Shanghai Sales Center:

Address: Room 701, Building Gem, No. 487, Tianlin Road, Shanghai, China

Zip Code: 201103

Tel: +86-21-33674316/33674850

Fax: +86-21-33674013

Website: www.liteputer.com.cn

E-mail: sales_china@liteputer.com.tw

DP-102D

RS-232 轉 DMX 介面 【使用手冊】



詠真實業股份有限公司

網址：www.liteputer.com.tw

E-mail：sales@liteputer.com.tw

目錄

第一章 系統簡介

1-1 功能簡介	11
1-2 串列傳輸速率設定	12

第二章 功能設定

2-1 PC 指定單一回路的調光值	13
2-2 PC 指定連續多回路的調光值（調光值相同）	14
2-3 PC 指定連續多回路的調光值（調光值不同）	14

第一章 系統簡介

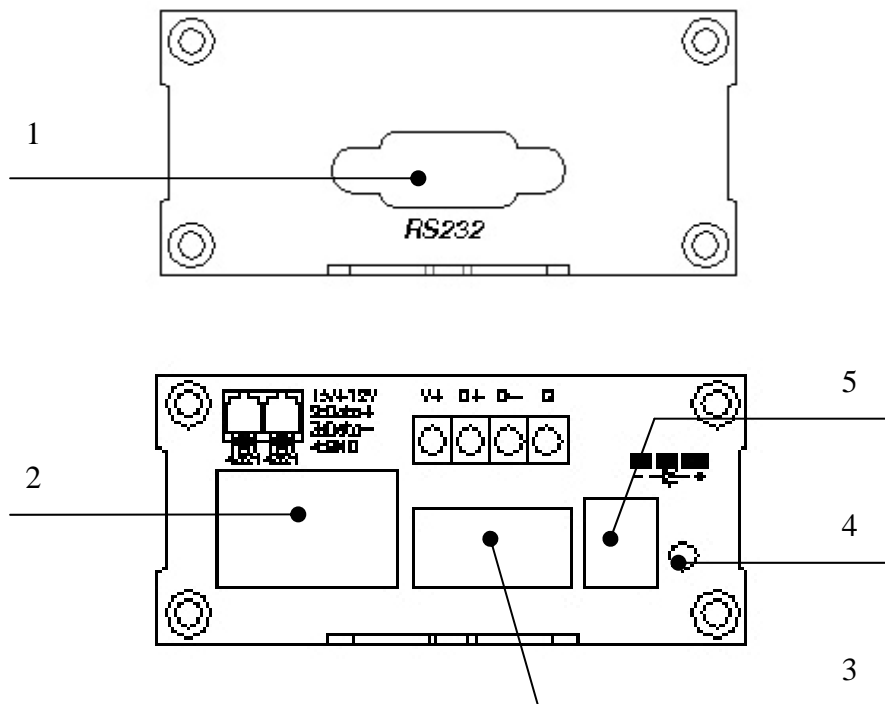
1-1 功能簡介

功能:

- RS232 轉 DMX 轉換器。

規格:

- 輸入電壓：DC9-12V
- 輸入信號：RS-232
- 輸出信號：DMX-512
- 尺寸：133(W)*35(H)*76(D)mm
- 重量：220g



1	RS-232 介面
2	DMX 信號輸出：PHONE JACK RJ11
3	DMX 信號輸出：綠色端子
4	電源指示燈
5	電源輸入：DC 12V/1A

1-2 串列傳輸速率設定

串列傳輸速率設定："19200, N, 8, 2"

19200 --- 串列傳輸速率 PC 和 DP-102D 通訊的串列傳輸速率

8 --- 8 位數據位

2 --- 2 位停止位

如您使用 VB，編程您可以是用如下命令：

MSComm1.Settings = "19200, N, 8, 2"

第二章 功能設定

2-1 PC 指定單一回路的調光值

使用 PC 指定單一回路的調光值

0H-11H-1H-~~Ard_High~~-~~Ard_Low~~-~~Value~~-0H-0H-5H

如需要設定 DMX 位址 5 的調光值為 50% (80H),您可使用如下指令：

0H-11H-1H-~~0H-5H~~-80H-0H-0H-5H

如需要設定 DMX 位址 12(0CH)的調光值為 20% (33H),您可使用如下指令：

0H-11H-1H-~~0H-0CH~~-33H-0H-0H-5H

第 12 回路

調光值=20%
 $20\% = 255/100 * 20 = 51 = 0x33$

Ard_High : DMX 位址的高位

Ard_Low : DMX 位址的低位

例如:

DMX 位址= 278 則 Ard_High=01H , Ard_Low=17H

DMX 位址= 20 則 Ard_High=0H , Ard_Low=14H

Value : 調光值

例如: 需要調光輸出 20%的亮度,可做如下計算:

20%轉換成十進制 $20/100 * 255 = 51$;

51 轉換成十六進制 51->33H

2-2 PC 指定連續多回路的調光值（調光值相同）

使用 PC 指定連續多回路的調光值

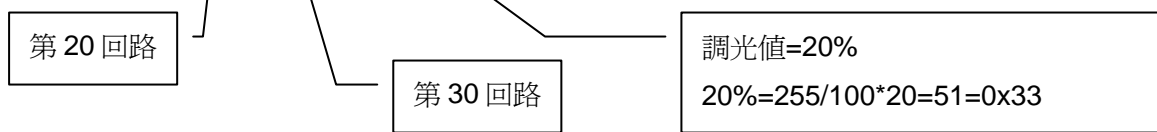
0H-11H-2H-**First_High-First_Low-End_High-End_Low-Value**-5H

如需要設定 DMX 位址 3 到 15 的調光值為 50% (80H)，您可使用如下指令：

0H-11H-2H-**0H-03H-0H-FH-80H**-5H

如需要設定 DMX 位址 20 到 30 的調光值為 20% (33H)，您可使用如下指令：

0H-11H-2H-**0H-14H-0H-1EH-33H**-5H



First_High : DMX 起始位址的高位

First_High : DMX 最後位址的高位

First_Low : DMX 起始位址的低位

First_Low : DMX 最後位址的低位

Value : 調光值

例如:將 DMX 位址 1-512 的所有回路輸出 0 (關閉所有輸出)，可以使用如下指令：

0H-11H-2H-**0H-1H-2H-0H-0H**-5H

2-3 PC 指定連續多回路的調光值（調光值不同）

使用 PC 指定連續多回路的調光值(各回路調光值不同)

0H-11H-3H-**Total CH-First_High-First_Low- CH1-CH2- CH3-**

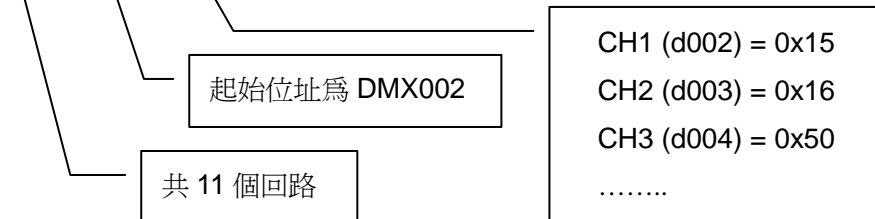
如需要設定 DMX 位址 3 到 6 的調光值為 10H,25H,32H,47H 您可使用如下指令：

0H-11H-3H-**4H-0H-03H-10H-25H-32H-47H**

如需要設定 DMX 位址 2 到 12 的調光值為

15H,16H,50H,60H,80H,EFH,FFH,23H,67H,26H,83H 您可使用如下指令：

0H-11H-3H-**0BH-0H-2H-15H-16H-50H-60H-80H-FFH-23H-67H-26H-83H**



Total CH : 在指令中共設定多少回路

First_High : DMX 起始位址的高位

First_Low : DMX 起始位址的低位

CH1 : 起始回路對應的調光值(在本例中對應的是 DMX 002 的調光值)

CH2 : 起始回路後的那個回路對應的調光值(在本例中對應的是 DMX 003 的調光值)

CH3 : 在這個例子中對應的是 DMX 004 的調光值

保證說明

我公司保證履行以下承諾：

- 1、 我公司只對 DP-102D 設備本身負責。
- 2、 在銷售之日起，一年內免費保修任何 Lite-puter 的由於工藝、材料等原因引起的故障產品。
- 3、 我們不提供上門服務。如果 Lite-puter 設備出現故障,請將設備送至我分公司或臺北總公司。

*** 特殊說明 ***

由於濫用、錯用、不小心（碰撞或不適當安裝）或不可抗因素造成的故障不在以上服務範圍之內。

變更記錄

版本	說明
A	最初發行
B	修改書寫錯誤

發行時間：2010 年 8 月

Lite-Puter

臺灣總公司：

詠真實業股份有限公司

地址：臺北縣汐止市大同路三段 196 號 9 樓

郵編：22103

電話：+886-2-86472828

傳真：+886-2-86472727

網址：www.liteputer.com.tw

郵箱：sales@liteputer.com.tw

上海分公司：

永林電子（上海）有限公司

地址：上海市閔行區虹梅南路 3509 弄 298 號 B5 樓

郵編：201108

電話：+86-21-54408210

傳真：+86-21-64978079

上海銷售中心（漕河涇辦公室）：

地址：上海市徐匯區田林路 487 號寶石大廈 701 室

郵編：201103

電話：+86-21-33674316/33674850

傳真：+86-21-33674013

網址：www.liteputer.com.cn

郵箱：sales_china@liteputer.com.tw