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USER'S MANUAL

Showline

RDM Commander

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Philips Showline Offices

Philips Entertainment Dallas

10911 Petal Street
Dallas, TX 75238
Tel: +1 214647 7880
Fax: +1 214647 8030

Philips Entertainment Europe

Marssteden 152
Enschede 7547 TD
The Netherlands
Tel: +31 53450 0424
Fax: +31 53450 0425

Philips Entertainment New Zealand

19 - 21 Kawana Street, Northcote
Auckland 0627, New Zealand
Tel: +64 9481 0100
Fax: +64 9481 0101

Philips Entertainment Lighting Asia Limited

Unit C, 14/F, Roxy Industry Centre
No. 41 - 49 Kwai Cheong Road
Kwai Chung, N.T. Hong Kong
Tel: +852 27969786
Fax: +852 27986546

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RDM Commander User's Manual

Please follow the steps as below.

Step 1. Power on the unit and wait for at least 2 seconds, select RDM Tester menu at the main menu.

Step 2. Select the user defined RDM parameters (RDM PID ≥0x8000).

Step 3. Select and press the function menu Set.

Step 4. Keep on pressing the Update key, and press the F1 key or F2 key simultaneously to define the parameter and save it to the responding function key.

Once finished defining the function keys, user can set the RDM parameters by shortcut operation.

The hardware code of this unit is upgradable. Copy the source hardware code and paste it into the RDM_Commander menu of the mini SD card, then insert the mini SD card to the SD card socket of this unit. Turn off the unit. Keep on pressing F1 and F2 key at the same time will power on the unit again, the unit will read the new hardware code file automatically and start updating.

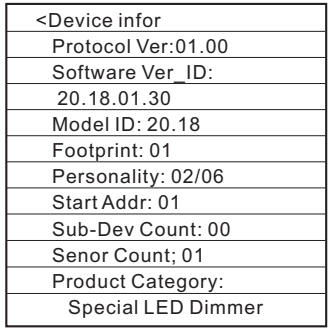
After update, the unit will automatically restart.

Calibration: Set ON or OFF the calibration function.

INFOR Key

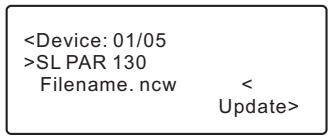
Press INFOR key to check the related RDM devices' information. The LCD display will show as below.

View Device_info: press the < at the third line to acess the sub-menu, and the LCD display will show information as below.



UPDATE key

Press UPDATE key to update the hardware code. The LCD display will show as below.



Filename. ncw: press the < at the third line to select the file name to be updated.
Update: press the > at the fourth line to activate the updating.

At present this function can only be available to the fixtures with upgradable hardware code.

F1/F2 key

User can use these two function keys (F1 and F2) to define the RDM parameter function.

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GENERAL INFORMATION

Description

Thank you for your purchase of the RDM Commander. The RDM Commander is a professional RDM tester with the features of stylish design and versatility. With it's flexible dial wheel, the user may use it to access all the menus and do the tests DMX packet and cable concerned.

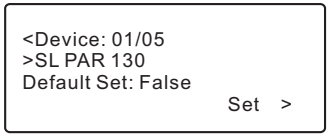
It's 4x20 characters LCD displays the menu states and the received DMX data which makes the operation interface is very friendly. Please read this user's instruction carefully before operation.

Safety Instructions

- Reduce the risk of electric shock or fire when using this unit.
- Do not immense in or expose to water.
- Turn off this unit, if not being used for a long time.
- Do not use immediately in the event of malfunction.
- Do not dismantle or modify the unit, only by qualified staff.

Specifications

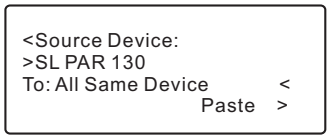
Power Input	9V DC , 500mA (an AC ~ DC adaptor included or built-in rechargeable battery)
Power Consumption	4.5 W
Compliant Protocols	Standard DMX512(1990) and DMX-1000K, RDM
DMX In	3pins/5 pins male XLR connectors
DMX Out	3pins/5 pins female XLR connectors
MIDI In	5 pins male XLR socket
IP Rating	IP20
Dimension	207.5X208X75mm
Weight	0.6Kg



Default Set: Select default setting or not.

COPY key

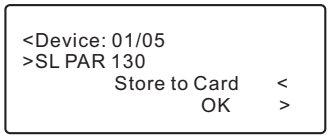
Press COPY key to copy the parameters of the RDM device. The LCD display will show as below.



Source Device: To select the source device.
To: To select the target device.
All Same Device: all the devices that the Manufacturer No. and Model No. are the same.
Paste: Copy the RDM parameters of the source device and then paste them into the target device.

BACKUP key

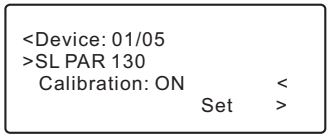
Press BACKUP key to backup RDM parameters. The LCD display will show as below.



Store to Card: save the RDM parameters into the SD card.
Restore from Card: Restore the RDM parameters from the SD card.

CAL key

Press CAL key to calibrate the color of RDM devices. This operation is only available to the fixtures with color calibration function. The LCD display will show as below.



```
< Device: 01/05
> SL PAR 130
  Addr: 001          <
                Set  >
```

Device: The total searched RDM devices and the current device number.
>SL PAR 130: The desired device to be set.
Addr: The current start address of the device.

Press < at the third line to set the start address, the LCD display to show as below:

Addr: xxx/yyy <

xxx stands for the current address or the address to be set, while yyy stands for the provided reference address.

Set: Once finish setting the desired parameters, send them to the RDM devices.

MODE key

Press MODE key to set the working mode of the RDM device. The LCD display will show as below.

```
<Device: 01/05
>SL PAR 130
Single Channel Mode/001  <
                    Set  >
```

Char String/xxx: Selected working mode and the DMX channel.

LABEL key

Press LABEL key to rename the RDM device. The LCD display will shows as below.

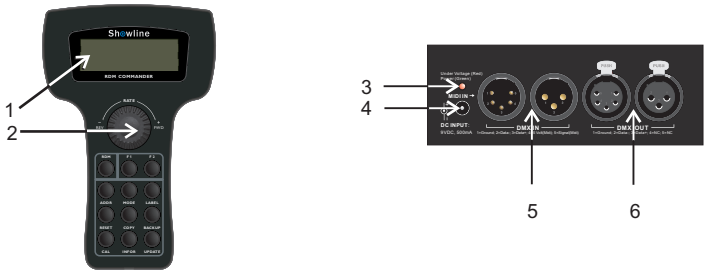
```
<Device: 01/05
>SL PAR 130
L:SL PAR 130          <
                Set  >
```

L: xxx: The characters need to be set.

RESET key

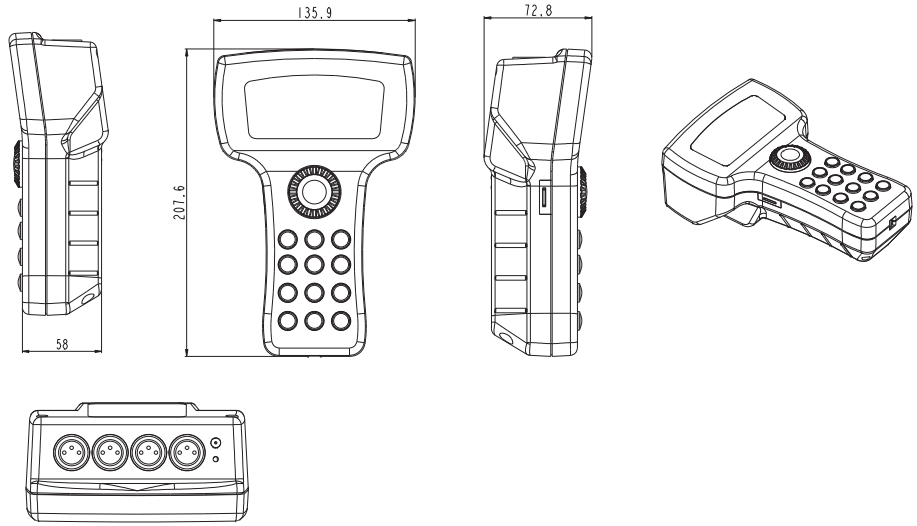
Press RESET key to restore the default parameters of the RDM device. The LCD display will show as below.

Product View



1. **LCD :** Displays the functions and guides you to operate the unit.
2. **Dial Wheel :** Used to operate this device.
3. **Power Indicator :** It will light red when the unit is in the state of "under voltage". It will light green when the unit was supplied with the full power source .
4. **DC INPUT:** Connects to the power of 9V DC, 500mA .
5. **DMX/MIDI IN:** Used to input DMX signal via 5-pin/3-pin connector. To input MIDI via 5-pin connector.
6. **DMX OUT :** Outputs DMX signal via 5-pin/3-pin connector.

Physical Diagram



OPERATION GUIDE

RDM Commander, which can be applied in various lighting occasions to meet your requirements, provides ample menu options in 20 x 4 LCD window for you. The desired menu or window can be activated by turning the Dial wheel, and by pressing this Dial wheel in the central place will access to the menu functions.

NOTE: If you want to browse the next forward menu, please turn the Dial wheel clock -wise. On the contrary, you may turn it unticlockwise to browse the previous menu option.

The power of this unit can be supplied by built-in storage battery or DC 9V adaptor. When using DC 9V adaptor for this unit, the built-in battery will automatically be charged at the same time.

To increase the charging speed, do not switch on this unit. The time for full charging battery is about 3~5 hours, which can supply the unit for 6~8 hours. When switching the unit on at first, with its switch at back cover, the LCD window shows main window information as follows:

Main Menus

Power on the unit, the LCD will display the unit name and current software version. Wait for more than 2 seconds with no operation, the LCD will automatically display the main menus. Pressing the dial wheel will access the top window.

```
< DMX Packet test  >
  DMX data--RX     >
  DMX data--TX     >
↓ RDM Teseter      >
```

There are 11 main menu options for your choice, including DMX packet test, DMX data-RX, DMX data-TX, RDM Teseter, DMX 1000K--RX, DMX 1000K--TX, Moving light, Cues Save/Run, Cable Test, MIDI data--RX and System setup.

```
< DMX 1000K--RX  >
  DMX 1000K--TX  >
  Moving Light   >
↓ Cues Save/Run  >
```

```
↑ Cable Test     >
  MIDI data-RX   >
  System Setup   >
```

DMX Packet Test

Turn the Dial wheel clockwise to select DMX packet test and then press the Dial wheel to access this function.

Contrast Level: The default level is 05 and it must range from 01 to 10. User can improve the display effect by increasing the Contrast Level when the voltage is low.

Back Light: To change the state of back light, you can enable the label > at the second line. Pressing the Dial wheel to turn on/off the back light, while pressing it again to complete your setting and exit "Back light". Turn on the Back light, it will be light when setting the Encoder. The back light will automatically off if there is no operation on Encoder within 10 seconds.

Display: You can also change the value display in three modes, including decimal, hexadecimal and percent. To save what you have set, press the label > at the fourth line to confirm by Dial wheel. Without saving, enable the label < to return the previous menu.

For more information, press ? for help.

```
< 3. Display setting
  Contrast _level: 1-10
  Back light : On/Off
  dec, hex or % data
```

Shortcut Operation(Function Keyboard)

There are 11 keys in total on the front panel, which can be used to set the common parameters of the connected RDM devices.

Functions of BACKUP and UPDATE acquire a mini SD card. Connect the mini SD card to PC with a proper card reader and then operate as below.

(1) Create a subdirectory named rdm_commander under the root menu of mini SD card.
(2) COPY the files to be updated and the stored data to the subdirectory.
(3) Eject the mini SD card from the PC, and then insert it into the mini SD slot of this unit.

Power on the unit and wait for more than 2 seconds, the LCD will automatically display the main menus. Press **RDM key** to activate the RDM shortcut function. The unit will search the online RDM devices automatically and access the start address setting function(**ADDR**) . The LCD display shows as below.

1. DMX & RDM Setting

Turn the Dial wheel to DMX & RDM Setting and press it, then the LCD window shows the following message for you.

```
< DMX& RDM SETTING ?
  TX Start Code  : 000   >
  RX Start Code: 000     >
  Max Level: Normal      >
  Auto Identify OFF      >
  16bit: Coarse first    >
              Confirm    >
```

TX Start code: You can set the start code for DMX 512 signal transmission, which can be reflected in the DMX data-TX function. The setting range is 0-255.

RX Start Code: The default of start code is set to 000, that means the unit only receive DMX signals with 000 start code . If you would like to amend it, use the Dial wheel for this purpose. The setting range is 0-255 and All. All means receive DMX signals with all kinds of Start Code.

Max Level: There are two modes available: Normal and Hold Mode. Turn the Dial wheel to > at the second line, then pressing it can shift between Normal mode and Hold mode. In Normal Mode the unit will display all the received DMX data, while in Hold Mode it will display the maximum value of each channel.

AUTO Identify: There are two modes can be set: On and OFF mode. Set it ON, the fixture will automatically send Indentify order to the selected device in RDM Tester function. While set it OFF, the fixture will not automatically send Indentify order.

16bit: To set the order of the 16bit precision channel data. User need to make settings when selecting from TX-COLOR mode and CHASE mode. For example, PIXEL: 16bit-COLOR.

Press Confirm> to save all the settings in this menu.

2. Display setting

In this sub-menu you can adjust the display and contrast level of the LCD window by Dial wheel.

```
< Contrast  Level : 08  >
  Back light :     OFF  >
  Display :  Decimal    >
?              Confirm  >
```



```
≤ DMX packet test:
  1. Data format        >
  2. Data timing        >
  3. Data level ( Volt ) >
```

If there is no signal input and you have accessed each menu of Data format, Data timing, Data level (Volt) by the Dial wheel, the LCD window shows the same as follows:

```
≤ DMX packet test:
  Receive no signal  ?
```

You may locate the cursor to the label ? for help. In this case, the help message usually shows:

```
≤ DMX-512  tester  help
 No signal  or  signal
 not  complying  with
 USITT DMX-512( 1990 )
```

On the contrary, if there is signal input, you can do some DMX packet tests .

1. Data format

Turn the Dial wheel to select **Data format** and press it for viewing the total channels of external operator and the states of BREAK when receiving the signals.

The LCD window shows the channel information of external connected DMX operator.

```
≤ Data format      ?
 RX-Chan:  512
 Break:--OK--
 Signal preset
```

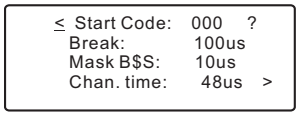
For the further information, you may locate the cursor to the label ? and press the wheel for help. The help information shows as below.

```
≤ Data format:
  Indication of --OK--
  means:Received
  signal is good
```

To return to the previous menu, press the ≤ by Dial wheel.

2. Data timing

Turn the Dial wheel to select **Data timing** and press it for application. You can view all the parameters of the received signals, including BREAK, Mask B$S, START CODE, CHAN TIME, Period Time. The LCD window will dynamically show data timing information.



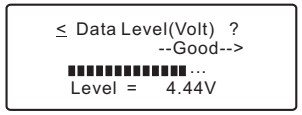
Select > firstly and then press it can shift from Chan. Time to Period Time.

For further information, you may use the help function by pressing Dial wheel.

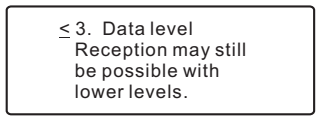
3. Data level (Volt)

Turn the Dial wheel to select **Data level (Volt)** and press it in the central place for application.

The LCD window will dynamically shows the information of signal voltage .



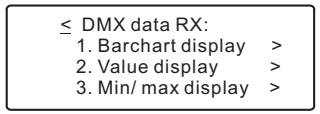
For the further information, you may use the help function by pressing Dial wheel. The help information shows as below.



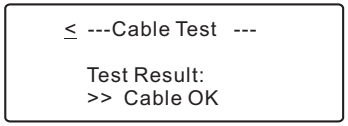
For another menu available, you may turn the Dial wheel backward to return. Then select the new entry by Dial wheel.

DMX Data-RX

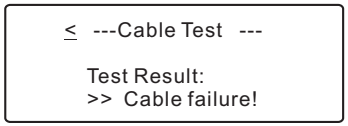
Turn the Dial wheel to select **DMX data--RX** and then press the Dial wheel access this menu function. There are 3 sub-menu options, including **Barchart display, Value display and Min/max display.**



If the cable works normal, the LCD window shows as follows:

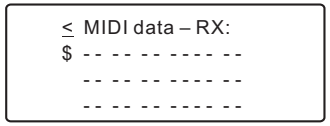


Otherwise, if the cable can not work normal, the LCD window shows:



MIDI data -- RX

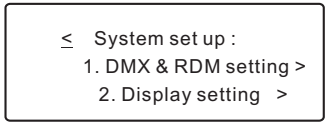
This option can receive MIDI signals and show it on the LCD window. The update speed of data is relate to the received signals. The larger the number of the received signals, the faster the data change speed. If there is no signal received, the data on the LCD window will keep the same.



System setup

In this menu you can set the system settings at your disposal. There are two sub-menus for your choice, including DMX &RDM setting and Display setting. You can set the the DMX & RDM parameters and the display mode of LCD, and so on.

Turn the Dial wheel to System setup and press it to enable this function. The LCD window shows as follows.



```
≤ Save Cue ( Scene ) ?
  As Cue No.:01        >
                 Save  >
```

For more information, press ? for help.

```
≤ Save Cue ( Scene )
  The cue with 512 data
  can be stored to
  memory or clear cues
```

Select Run cue then access the function, the LCD window show a message as below:

```
≤ Run more Cue:
  1.Start:01  > End: 99>
  2. Run Speed:01     >
  3.Fade Time:100%    >
```

Locate to > at the first line and turn the Dial wheel. Then you can set cue desire to run.
Locate to > at the second line and turn the Dial wheel to set the data change speed in the range of 01-10.
Locate to > at the third line and turn the Dial wheel to set fade time of data change in the range of 01-100.

Set the Auto Speed as 0, then user can modify the auto speed manually. The LCD window shows the following diagram.

```
Manual Mode    >
          Go   >
```

The data will change synchronously with each pressing of Go. You can save it into a specific number while you accessed " Save Cue" menu. This function can be done only NO DMX signal input.

Cable test

When enable this function, you can test the cable whether there are errors or not.

Use the standard DMX In/Output of this unit for connecting the cable. One head for female plug-in, another head for male plug-in. Then press > at the fourth line to start the test.

```
≤  Cable Test
   Connect Cable to
   DMX IN and DMX OUT
   Socket.          Press OK>
```

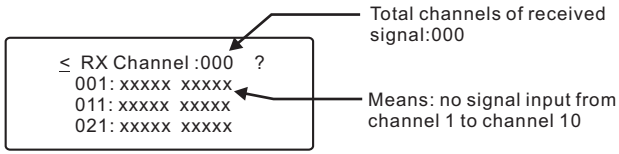

This DMX data--RX function can display the value of signal input by the means of Barchart and Value and Min/max, complying with the display mode that can be adjusted in the System setup menu.There are two display modes: Normal and Hold Mode.

In the **Normal** display mode, when pushing the fader relative to the specific channel of external operator, the relative channel value of the LCD window will change tempora -rily, conforming with the position of fader.

In the **Hold** display mode, when pushing the fader relative to the specific channel of external operator, the relative channel value of the LCD window may not change temporarily. The display value is only the max. value of al the adjustment by the fader.

1. Barchart display

Turn the Dial wheel forward to enter the Barchart display option. If there is no signal input, the LCD window always show empty information as follows:



Each line can indicate the values of 10 channels in all. To browse the other values of channels, turn the Dial wheel forward to select **>** , then press the Dial wheel . At this time you can turn Dial wheel backward or forward for this purpose.

On the contrary, if there is signal input, the LCD window will display the values of received signals in the bar chart diagram.

```
≤ RX Channel :512  ?
 >001:LLLLL LLLLL
  011: LLLLL LLLLL
  021: LLLLL LLLLL
```

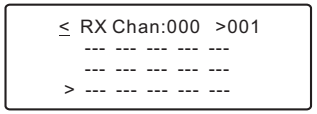
For the further information, you may use the help function by pressing Dial wheel. The help information shows as below.

Each bar chart indicates the different value of the fader.

```
≤ 1. Barchart display
  LLLLLLLLL Chan Level
    x = no signal
    - = no data
```

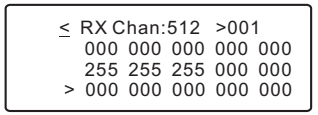
2. Value display

This option can display the value of signal input by the means of decimal, hexadecimal and percent. Turn the Dial wheel forward to enter the Barchart display option. If there is no signal input, the LCD window always show empty information as follows:



The default total channels is set to be 000 and the start channel always is automatically preset to be 001. If you would like to change the start channel, turn the Dial wheel to select > at the right side of the LCD window then press it. Now you can scroll to the desired channel No., then press the Dial wheel again to confirm.

On the contrary, if there is signal input, the LCD window will display the values of received signals in the following diagram.



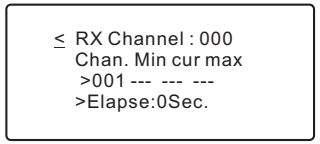
For decimal, hexadecimal or percent display mode, you can turn the Dial wheel to select > at the left side of the LCD window. And then press the Dial wheel to scroll to the desired mode. The display values of the relative channels will temporarily be changed according to the new setting.

NOTE: Other main display values of this unit may be converted, complying with the new display mode.

3. Min / max display

You can also display the values in a simple way when using this option , only for min. value, typical value, max. value. But the values will comply with the decimal, hexadecimal or percent display mode what you have set.

Supposed that you have set the percent display mode. If there is no signal input, the LCD shows as follows.

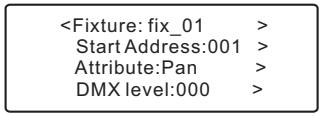


You can turn the Dial wheel to browse the functions of other channels.

If you would like to set the lighting function of this unit for testing the other lighting equipments, do pay attention to the relative channels parameters of them. What you have set must be complying with the devices.

2. Play mode

In this function you can test the fixtures by using the previous library settings. Turn on the Dial wheel to select **Play mode** . The LCD window show a message as follows:



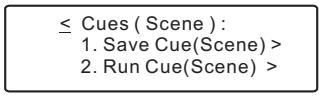
Locate to > at the First line and turn the Dial wheel. Then you can select the set fixture name. The relative library settings can be available. Complying with the fixture channel, locate to > at the second line and turn the Dial wheel to set the right start address.

Locate the > at the third line to the desired fixture attribute name. Then locate the > at the fourth line to set the DMX value of the fixture attribute.

Cue Save/Run

If there is DMX signal input at present, the saved cue can be the received signal. However, when no signal input, enabling this Save Cue function will save the previous received or running cue as new one. By the way, you can access the 512 channel of DMX data--TX menu to set values of the desired channels or modify the existed cue, and then enabling this Save Cue can also save the settings as new cue. User can save 99 cues/scenes at most.

When accessing this menu, the LCD window will ask for you the cue number to be saved.

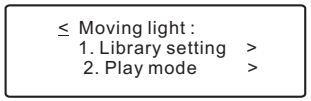


The default cue no. is preset to be 01. You can change the default cue number to the desired one. First locate to > at the second line and turn the Dial wheel for this purpose. To save the received data, press save> at the third line to confirm. Other -wise, automatically save the received data and the cue number will increase by 1 for the next saving.

The function and operation of DMX1000K--TX are similar to those of DMX data–TX. Please refer to the information of DMX data--TX on page 9.

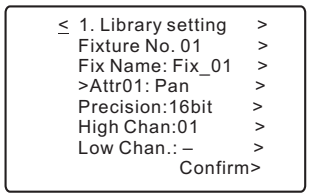
Moving light

Turn the Dial wheel to select **Moving light** and then press the Dial wheel to access this menu function. There are 2 sub-menu options, including **Library setting** , **Play mode**. You can set the function of each fixture channel, complying with the present library. The library of this unit is preset to meet your requirements in general. If you would like to use your own library, please mail us an attachment of this information for update. For more tests, in the **Play Mode** you can use the library settings and adjust the parameters of relative channels for this purpose. After accessing the **Moving light,** the LCD window usually shows as follows:



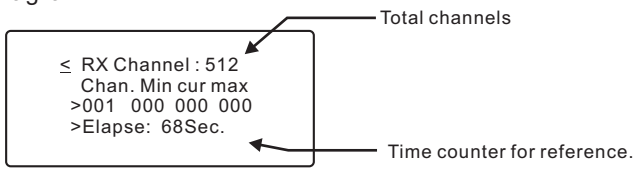
1. Library setting

To set the lighting function of the desired channel, you can use Dial wheel to access this option. The LCD window will show the fixture number, name and function of each channel. Remember that there are only 36 channels and 10 kind of fixtures in all, which can be set. And each channel has 29 effect functions to be selected.



Fixture No.: Select the fixture desired to edit. There are totally 32 pcs available.
Fix Name: Set the name of fixture.(totally 8 characters)
Attr01: Select the reference number of fixture properties. User can set 36 reference numbers at most.
Pan: Select the name of reference number. Totally 45 normal name are available.
Precision: Select the precision of fixture between 8 bit and 16 bit.
When setting the precision as 16 bit, the High Chan. and Low Chan. are the control channels of the fixture. While setting the precision as 8 bit, the High Chan. is the control channel of the fixture.
Confirm: Make sure and save the parameters you have set.

On the contrary, if the signal input has been received correctly, the LCD window displays the following diagram.



Note: The min value display is the min. value of all the adjustments referring to the present channel; the typ value display is the set value of the present channel; the max display is the max. Value of all the adjustments referring to the present channel.

To browse the value of each channel, turn the Dial wheel to select > at the third line of LCD window, then press the Dial wheel. At this time you can browse the desired channel by turning the Dial wheel backward or forward. Turn the Dial wheel to select > at the fourth line and press the dial wheel can reset the current value.

DMX Data -- TX

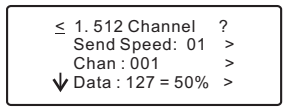
When switching on the unit, the receiving DMX signal can be transmitted automatically, with the STARTCODE you have set. Supposed that you aren't in this DMX data--TX menu now and there is no DMX signal input, if you have run the specific saved cue just now , the cue will be transmitted repeatedly.

In this case the new coming DMX signal will have priority to be transmitted. However, when accessing the Cable Test or MIDI data-RX menus, the transmitting signal will be halted.

While accessing this DMX data--TX menu, new coming DMX signal will be disabled. You are allowed to temporarily set the levels for the intended channels, and also have priority to transmit cue (scene) at a set rate. Remember there are 99 cues available.
Turn the Dial wheel to select **DMX data--TX** and then press the Dial wheel to access this menu function. There are 4 sub-menu options, including **Modify Channel, Single Channel, Color mode, Chase Mode.**

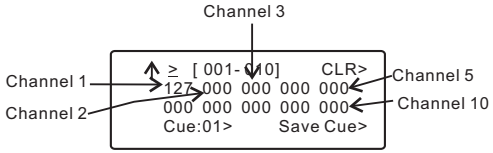
1. Modify Channel

This option can display the levels of 512 channels, and also be used for temporary adjustments, while the actual channel value can be held. When using the Dial wheel to enter this sub-menu, the LCD window usually shows as follows:



To adjust the temporary value of the desired channel, first enable the Dial wheel to > at the third line. Then adjust the "Data" at the fourth line. The "Data" display the value by the means of decimal and percent.

You may turn the Dial wheel to scroll to the next page. The LCD window shows the values of 10 channels at the following diagram.



Send Speed: To sent the output speed of different data packet. Please refer to the table below for more information.

Speed	"Space" for break	"Mask" between break & start code	"Mask" between frames	"Mask" between packet
1	100us	15us	52us	200ms
2	100us	15us	52us	100ms
3	100us	15us	52us	50ms
4	100us	15us	52us	30ms
5	100us	15us	48us	50ms
6	100us	15us	48us	30ms
7	100us	15us	48us	25ms
8	90us	10us	44us	50ms
9	90us	10us	44us	25ms
10	90us	10us	44us	23ms

Chan: To set the desired channel.
Data: To set the output value of the corresponding channel.
CLR: Zero cleaning the output value by shortcut operation.
Cue and Save Cue: Save the current output value as a cue. Maximum 99 cues can be saved.

You can set these values of 10 channels (001 -- 010).For example, set the value for channel 1. Locate the cursor to the desired channel, press the Dial wheel to select it. Then turning the Dial wheel to adjust the level. When satisfying the adjustment, press the Dial wheel again to confirm the settings.

NOTE

1) For "COMMAND: GET", when the UID(Unique ID) was chosen, the PID (parameter ID) can only be selected in the range of which the device supported, a part of the 45 PIDs or all of them.
2) Likewise, for "COMMAND: SET", the PID can only be selected in the range of which the device supported as well, a part of the 28 PIDs or all of them.
3)The manufacturer specific PIDs are displayed with hex form and which were excluded from the above 45 or 28 PIDs .
4)You can carry out GET "DMX_PERSONALITY_DESCRIPTION", GET"SENSOR_DIFINITION" and GET"SENSOR_VALUE" only you if perform GET " DEVICE_INFO" first.
5)You can GET or SET the relevant PID only if you perform GET " PARAMETER_DESCRIPTION" first.(" PARAMETER_DESCRIPTION" is a description for the relevant manufacturer specific PID.)
6) You can carry out GET "STATUS-ID_MESSAGES" only if you perform GET " STATUS_MESSAGES" first.

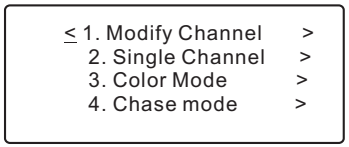
DMX-1000K--RX

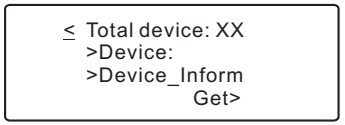
Turn and press the Dial wheel to access DMX-1000K RX. The LCD window shows you as follows and you can use the dial wheel to set the start channel.

The function and operation of DMX-1000K--RX Mode are similar to those of DMX Data--RX. Please refer to the information of DMX Data--TX on page 7.

DMX-1000K--TX

Turn and press the Dial wheel to access DMX-1000K TX. The LCD window shows you as follows and you can use the dial wheel to set the channel value.

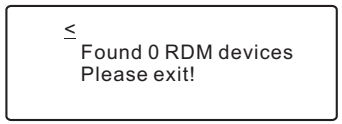




1). In the RDM system the RDM function of RDM Commander was used as a controller.

2). Total devices: Totally discovered RDM devices linked.
Device: The unit desired to operate.
Device inform: The properties of the unit.
Get: User can get or set command.

Turn and press the Dial wheel to access GET or SET COMMAND function. If your unit doesn't link to any RDM device, the LCD window will show you as follows:



If your unit discovered any RDM devices linking to your unit, the LCD window will show you ,

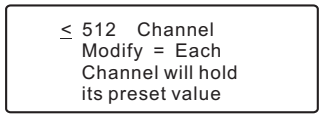
Turn the dial wheel to select the ">" of the second line right, you can select an unit ID and view it.
Turn the dial wheel to select the ">" of the third line right, you can select and view the details of each parameter. There are 45 parameters available for "COMMAND: GET"

Turn the dial wheel to select the ">" of the first line right, you can swap "GET" and "SET". To select "SET", the LCD show you as follows:

Turn the dial wheel to select the ">" of the second line right, you can select the unit you want to set the command for it.

Turn the dial wheel to select the ">" of the third line right, you can select and set the value for each parameter. There are 28 parameters available for "COMMAND: SET"

You may also adjust the other 502 channels levels. Locate the cursor to > at the first line of LCD, press the Dial wheel and turn it to the desired channels for new settings. Remember that there are only 10 continual channels available for your choices every time.
If you would like to set these 512 channels to be 000, use the Clear All function by pressing the CLR> at the right of the first line.
Locate the label ? for more details. Help information shows as follows.



2. Single Channel

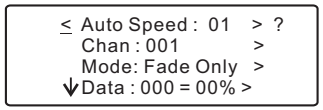
Turn the Dial wheel to select **Single Channel** option. You can adjust the speed, channel, mode, level for your requirements when applying this function. The speed value can be increased from 1 to 10. And there are 4 modes for reference, including Fade Only, Auto On/ Off, Ramping, Stop.

Fade Only: Changing the channel value by Dial Wheel in the range of 0~255.

Auto On/Off: The channel value will be changed between 000 and 255, complying with the speed.

Ramping: The channel value will steadily increase one by one till to 255, complying with the speed. Then repeat the sequence of 0 to 255.

Stop : The channel value can not be changed and held.
The LCD window usually shows the following diagram.



The Speed function takes effect only when the mode is set as Auto On/Off or Ramping.
In this case, the level of the desired channel is adjusted automatically by this unit. You can adjust the level by dial wheel when the mode is set to Fader Only. However, there is only one channel level varied from the other 511 channels levels. And the other 511 channels levels are 0.

In addition, when the channel is set to be " 001 - 512 (all) ", you can set all the 512 channels to the same values.

Locate the label ? for more details. Help information shows as follows.

```
≤ 2. Single Channel
  512 data is same, or
  one data is special
  the others are zero
```

3. Color Mode

Turn the Dial wheel to select this function, the LCD window shows a message as follows:

```
≤ 3. Color Mode ?
  Pixel: 8Bit-1color  >
  Start Chan: 001     >
  Master Level: 255   >
  Auto Speed:01       >
  Fade Time : 100%    >
  Cue:01  >  Save Cue >
```

Pixel: To select the 8 bit pixel or 16 bit pixel luminaires, each consists of 9 colors. When selected the 16 bit luminaire, user can set the order of the Coarse channel and Fine channel, by selecting System Setup menu, then selecting 1.DMX&RDM Setting and 16bit:Coarse first/Finefirst to make setting.

Start Chan: To set the start address of the first pixel in the range of 1-512.

Master Level: To set the maximum value of the DMX output in the range of 0-255.

Auto Speed: To set the changing speed of data in the range of 01-10.

Fade Time : To set the fade time ratio of data change in the range of 0-100.

Locate the label ? for more details.

Set the Auto Speed as 0, then user can modify the auto speed manually. The LCD window shows the following diagram.

```
↑  Manual Mode   ≥
                 Go  >

   Cue:01>       Save Cue>
```

The data will change synchronously with each pressing of Go >. You can save it into a specific number while you accessed " Save Cue" menu. This function can be done only NO DMX signal input.

4. Chase Mode

Turning the Dial wheel to select **Chase Mode**, you can test the DMX luminaires with multi channels. When accessing this option, the LCD window shows thefollowing diagram.

```
≤ 4. Chase Mode
  Pixel: 8 Bit-1 color   >
  Total Pixel: 100       >
↓ Pixel/Group: 001       >
```


Pixel: To select the 8 bit pixel or 16 bit pixel luminaires, each consists of 9 colors. When selected the 16 bit luminaire, user can set the order of the Coarse channel and Fine channel, by selecting System Setup menu, then selecting 1.DMX&RDM Setting and 16bit:Coarse first/Finefirst to make setting.

Total Pixel: The maximum luminaries can be tested, user can set it in the range of 1 -512.

Pixel/Group: Set how many luminaires as a group according to the range of the Total Pixel.

```
↑ Jump pixel: 001    >
  Test Color: All    >
  Start Chan : 001   >
↓ Master Level: 255  >
```

Jump Pixel: To set the number of luminaires each jump according to the range of Pixel/Group.

Test Color: To select the properties of luminaires desired to test.

Start Chan: To set the start address of the DMX data chain in the range of 1-512.

Master Level: To set the maximum value of the DMX output in the range of 0-255.

```
Auto Speed: 01      >
Fade Time:100%      >
Cue:01 >  Save Cue >
```

Auto Speed: To set the changing speed of data in the range of 01-10.

Fade Time : To set the fade time ratio of data change in the range of 0-100.

Set the Auto Speed as 0, then user can modify the auto speed manually. The LCD window shows the following diagram.

```
↑  Manual Mode   >
                 Go  >

   Cue:01>       Save Cue>
```

The data will change synchronously with each pressing of Go. You can save it into a specific number while you accessed " Save Cue" menu(Maximum 99 cues can be saved). This function can be done only NO DMX signal input.

RDM Tester

Turn the Dial wheel to select **RDM Tester** and then press the Dial wheel to access this menu function. The LCD window usually shows as follows: