

HDL[®]

User Manual

DMX Recorder

SB-DN-Recorder



buspro

www.hdlautomation.com

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1. Overview

HDL - MCR - DMX, DMX recorder can record scene from another device and play it out. Can work with Lighting console , DMX decoder , panel etc.

2. Main functions

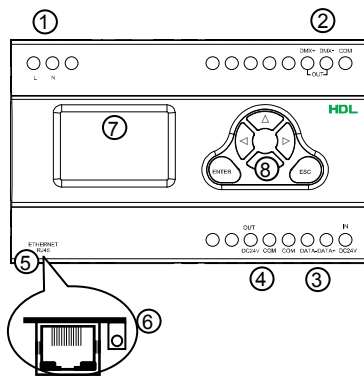
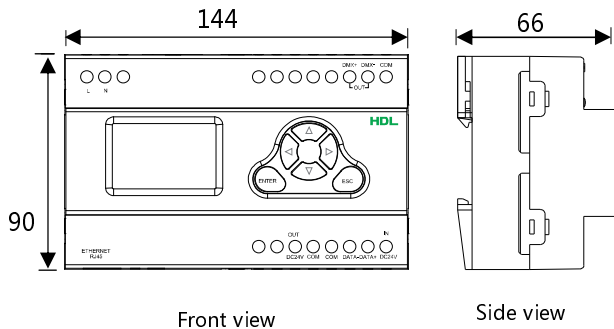
- PC remote operation、download program、play program、delete program
- Signal interface : HDL-BUS、RJ45
- Auto operate、auto record、auto play、auto delete; auto paly has two modes: play one and repeat all
- Wall panel play
- Support online upgrade
- Others : DMX output can select NET-DMX、DMX512; password protect、IP setting、view storage space

3. Basic parameters

- Power input : AC 220±10%
- BUS Power consumption : 500mA/DC24V
- Total capacity : 256Mbytes
- Record time(up to capacity) : 10400s , about 2hours 50mins
- Program number : max.50
- Signal type : DMX512 (1990)
- Environmental conditions :

Working temperature	0°C~45°C
Working relative humidity	20%~90%
Storage temperature	-40°C~+55°C
Storage relative humidity	10%~93%
- HMI : 128x64 raster graphic LCD
6 soft-touch buttons
- Installation mode : standard 35mm DIN Rail Mount
- Dimension : 144x90x66(mm)

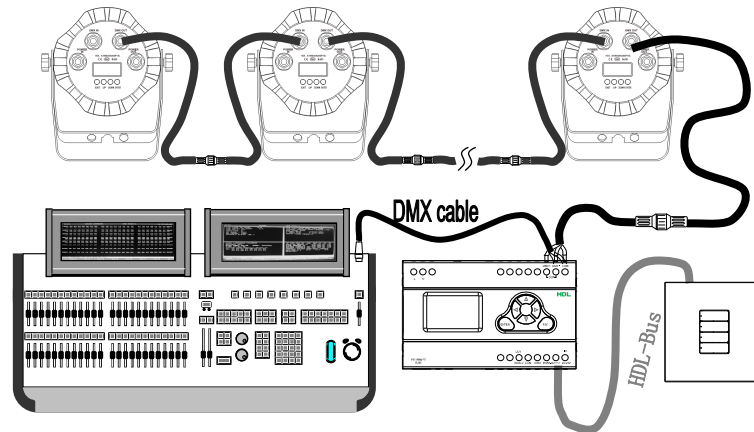
4. Dimension and specifications



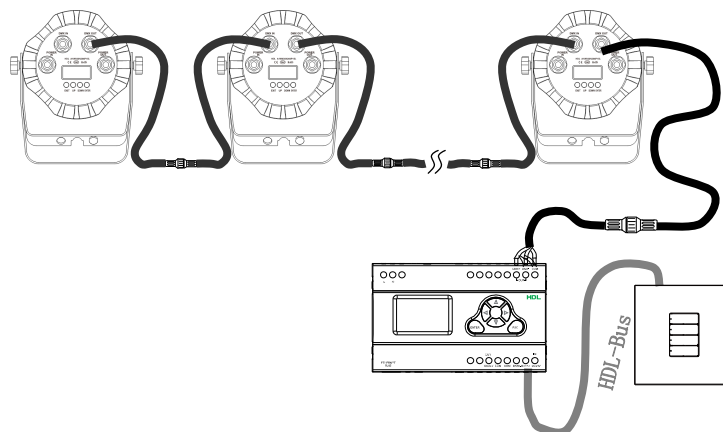
- ① L、N is AC220V ~ 240V input terminal
- ② DMX+、DMX - 、COM is DMX512 signal connection terminal ,DMX input or output
- ③ COM、DATA-、DATA+、DC24V is RS485 connection terminal.
- ④ DC24V (OUT) \ COM is DC24V output terminal, can provide DC Power for other devices.
- ⑤ Ethernet port: RJ45.
- ⑥ CPU working indicator , flicker when working.
- ⑦ LCD
- ⑧ Button
 - > **【Enter】** Confirm Button
 - > **【Esc】** Esc button
 - > **【↑】** Page up , Used for modify by manual, will increase when pushing
 - > **【↓】** Page down , Used for modify by manual, will decrease when pushing
 - > **【←】** Left Move—Used for selecting of item and cursor location
 - > **【→】** Right Move-- Used for selecting of item and cursor location

5. System connection

Wiring diagram when recording (see 6.5.2 to set the Recorder in recording)



Wiring diagram when playing (see 6.5.1 to set the Recorder in playing)



Note : this picture is just an example , customers can connect it according to the actual need

Installation requirement : make sure good ventilation environment, pay attention to water-proof, shake-proof and dust-proof when using

Cable require : power cable : 0.75mm²copper wire

Ethernet cable : cat5e

HDL - BUS cable : cat5e or HDL Bus/KNX cable

DMX512 signal cable : Three (or five)core shielded audio line

HDL - BUS definition : COM→White Orange/ White Brown

DATA - →White Blue/ White Green

DATA+ →Blue/Green

+ DC24V →Orange/ Brown

6. Operation

6.1 Unlock/Lock

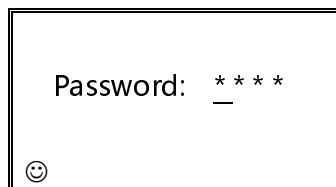
. Unlock—In the Power on Interface when locked, Press **【Enter】** and **【Esc】** Button together

. Lock Function

- Lock Automatic—No Operation for 5 minutes
- Lock manual--Press **【Enter】** and **【Esc】** Together
- can' t lock automatic when there is Programs played by Module

6.2 Password Input

—— Menu select interface

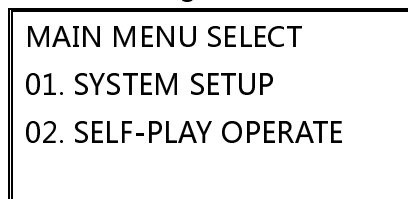


The default password is 4573, user can change it.

- Press **【↑】** / **【↓】** input the password
- Press **【←】** / **【→】** move left and right to set the different password bit
- Press **【Enter】** to make cofirmation
 - > Password correct—Go inside Main menu interface
 - > Password wrong—can' t go inside interface, display "Inprt Error"
- Press **【Esc】** to go back to the Power on Interface

6.3 Operation in Main interface

—— Menu selecting interface



- Press **【↑】** / **【↓】** to select sub menu , menu be selected will flash
- Press **【Enter】** to go inside the menu which selected
- Press **【Esc】** to go back to the Power on Interface

In main menu interface there are:

- > System—Bus ID set, Ethernet set, Network DMX set, LCD Back Light set, Password modify set, Factory Default set

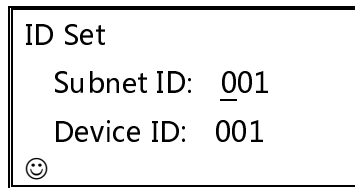
> Programs—Play program set, Record Program set, Delete Program set, Play mode set

6.4 System setting

6.4.1 Bus ID address setting

—— Go inside as following : Main menu --> System --> Bus ID setting

—— Interface



—— Range for Subnet ID and Device ID : 000--255

—— Press **[←]** / **[→]** To move and select location, indicate as “_”

—— Press **[↑]** / **[↓]** modify setting value

—— Press **[Enter]** save current setting

—— Press **[Esc]** exit , setting will not saved , go back “system” submenu

—— When setting out of range, will indicate “Out of range” , cannot save or confirm

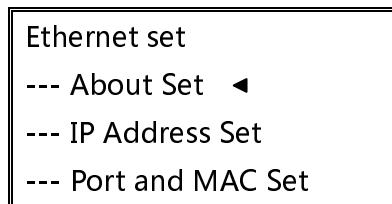
—— If there is “☹” icon indicates , Please save before exit.

6.4.2 Ethernet setting

6.4.2.1 Menu function selecting

. Go inside as following : Main menu --> System --> Ethernet setting

. Interface



. Press **[↑]** / **[↓]** to select , This icon “◀” used for indicate the item which already selected

. Press **[Enter]** to go inside the selected submenu

. Press **[Esc]** to exit , and go back to “Ethernet setting” menu.

6.4.2.2 View Ethernet setting

—— Go inside as following : Main menu --> System --> Ethernet set --> View set

—— Interface

```

IP ADR:192.168.010.233
ROU IP:192.168.016.001
Server Port:6000
MAC ADR:19-FF-62
  
```

—— Press **[Esc]** to exit , and go back to “Ethernet setting” menu.

6.4.2.3 IP address setting

—— Go inside as following : Main menu --> System --> Ethernet set --> IP address set

—— Interface

```

Ethernet set
IP ADR:192.168.010.233
ROU IP:192.168.010.001
☺
  
```

—— Press **[←]** / **[→]** To move and select location , indicate as “_”

—— Press **[↑]** / **[↓]** modify setting value

—— Press **[Enter]** save current setting

—— Press **[Esc]** exit ,setting will not saved ,go back “Ethernet set” submenu

—— When setting out of range, will indicate “Out of range” , cannot save or confirm

——If there is “☺” icon indicates , Please save before exit.

6.4.2.4 Server Port and MAC address setting

—— Go inside as following : Main menu -->System -->Ethernet set--> Port and MAC address

—— Interface

```

Ethernet set
Server Port : 6000
MAC ADR : 19-FF-62
☺
  
```

—— Press **[←]** / **[→]** To move and select location

—— Press **[←]** and **[→]** together, Select Port and MAC address setting menu

—— Press **[↑]** / **[↓]** modify setting value

—— Press **[Enter]** save current setting

—— Press **[Esc]** to exit , will not save the setting value , go back to “Ethernet set”

—— If there is “☺” icon indicates , Please save before exit.

6.4.3 Network DMX setting

—— Go inside as following : Main menu-->System-->Network DMX setting

—— Interface

Net DMX Set Protocol : Art-Net Universe : <u>001</u>
--

—— Press **【←】** / **【→】** To move and select location

—— Press **【↑】** / **【↓】** modify setting value

—— Press **【Enter】** save current setting

—— Press **【Esc】** to exit , will not save the setting value , go back to "System"

—— When setting out of range, will indicate "Out of channel" , cannot save or confirm

—— If there is "☹" icon indicates , Please save before exit.

6.4.4 Module IP address setting

—— Go inside as following : Main menu -->System -->Module IP set

—— Interface

Host IP Set IP address : <u>192.168.010.233</u> ☺
--

—— Press **【←】** / **【→】** To move and select location, indicate as " _ "

—— Press **【↑】** / **【↓】** modify setting value

—— Press **【Enter】** save current setting

—— Press **【Esc】** to exit , will not save the setting value , go back to "System"

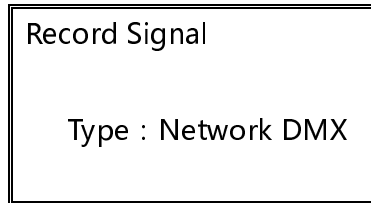
—— When setting out of range, will indicate "Out of channel" , cannot save or confirm

——If there is "☹" icon indicates , Please save before exit.

6.4.5 Record Signal Select

—— Go inside as : Main menu --> System--> Record Signal Select

—— Interface



—— Press **【↑】** / **【↓】** to select signal , DMX-512 or Network DMX

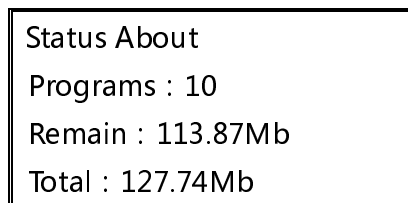
—— Press **【Enter】** to confirm

—— Press **【Esc】** to exit , Go back to "System" submenu.

6.4.6 View Status

—— Go inside as : Main menu --> System--> View Status

—— Interface

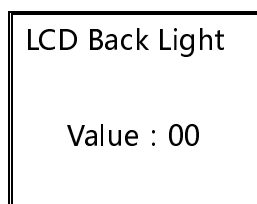


—— Press **【Esc】** to exit , Go back to "System" submenu.

6.4.7 LCD Back light setting

—— Go inside as : Main Menu --> System--> LCD back light

—— Interface



—— Press **【↑】** / **【↓】** to change the back light

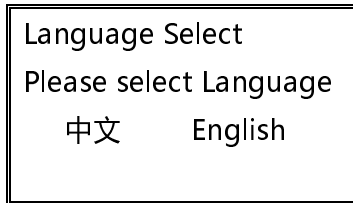
—— Press **【Enter】** to confirm

—— Press **【Esc】** to exit , Go back to "System" submenu.

6.4.8 Language Select

—— Go inside as : Main Menu --> System --> Language Select

—— Interface



—— Press **【←】** / **【→】** to select Language

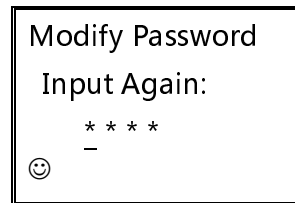
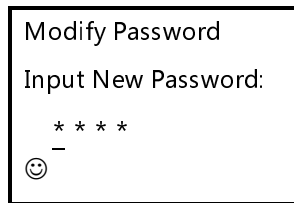
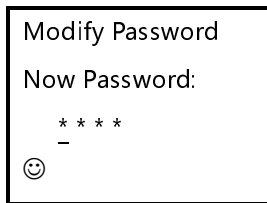
—— Press **【Enter】** to confirm

—— Press **【Esc】** to exit , Go back to "System" submenu.

6.4.9 Password Modify

—— Go inside as : Main menu -->System -->Password Modify

—— Interface



——Current Password

- > Press **【←】** / **【→】** to move left and right and select
- > Press **【↑】** / **【↓】** to input value
- > Press **【Enter】** to confirm the current password
- > Indicate "Password Wrong" when input wrong password
- > Will ask to input new password when input correct password
- > Press **【Esc】** to exit , Go back to "System" submenu.

—— New password

- > Press **【←】** / **【→】** to move left and right and select
- > Press **【↑】** / **【↓】** to input value
- > Press **【Enter】** to confirm, and then input new password again
- > Press **【Esc】** to exit , Go back to "System" submenu.

—— Input new password again

- > Press **【←】** / **【→】** to move left and right and select
- > Press **【↑】** / **【↓】** to input value
- > Press **【Enter】** to confirm
- > If the password is the same with new password, will indicate "Modify

Succeed"

- > Press **[Enter]** to confirm
- > Press **[Esc]** to exit , Go back to "System" submenu.

—— When finish , Press **[Enter]** or **[Esc]** to go back "System"

6.4.10 Factory Default setting

Warning : This function will change your setting!

—— Go inside as :Main menu -->System -->Restore to factory default setting

—— Interface

```
Initial System
Are You Initial ?
      No      Yes
```

—— Press **[←]** to select "NO" , Press **[→]** to select "Yes"

—— Press **[Enter]**

- > If select "Yes" , will restore to factory default setting
- > If select "NO" , then exit , Go back to "System" submenu.

—— Press **[Esc]** to exit , Go back to "System" submenu.

6.5 Program

6.5.1 Play program

—— Go inside as : Main menu -->Program -->Play Program

—— Interface

```
Play Program
01: UserRecord-25800
02: UserRecord-20069
03: UserRecord-34110
```

—— Press **[↑]** / **[↓]** to select you wanted program

—— Press **[→]** to check the details about program: Time、Total Frame、Speed

—— Press **[Enter]** to check the mode and process of the programs

—— Press **[Esc]** exit from the current interface

Note : The name of the program is assigned randomly by Module, only for information , Can' t change.

6.5.2 Record Program

. Go inside as : Main menu -->Program -->Record Program

. Interface

```
Record Program
Program:01
Name: UserRecord-20069
Operate : Ready for Record
```

—— Press **[Enter]** to start record

6.5.3 Delete Program

—— Go inside as : Main menu -->Program -->Delete Program

—— Interface

```
Delete Program
01: UserRecord-25800
02: UserRecord-20069
03: UserRecord-34110
```

```
Delete Programme
Do you want to delete?

NO      Yes
```

—— Press **[↑]** / **[↓]** to select the program which you want to delete

—— Press **[Enter]** to confirm if really delete

—— Press **[←]** / **[→]** to select Yes or NO

—— Press **[Enter]** to confirm

—— Press **[Esc]** to exit from the current interface


6.5.4 Play mode

—— Go inside as : Main menu--> Program -->Play mode

—— Interface

```
Play mode

Mode is: Single
```

- Press **【↑】** / **【↓】** to select mode: Single or Cycle
- Press **【Enter】** to confirm
- Press **【Esc】** to exit from current interface
- If there is “” icon indicates , Please save before exit.