DLC901 – User Manual



The DLC901 is a multifunctional device with the following characteristics:

- Remote control of DMX fixtures: automatically identifies fixtures connected with DMX and provides remote access to setup menus
- Remote control of RDM fixtures: automatically identifies RDM fixtures and allows to set DMX address and DMX mode
- Programming device: capability to download software updates and save to multimedia card
- **DMX Output**: configures and sends DMX signals up to 512 channels
- **DMX Tester:** controls incoming DMX values up to 512 channels (entire DMX universe)

2 Hardware

2.1 Input and Output

As shown in the below diagram, in/out connections and functions for the DLC901 are as follows:

• DMX IN – DMX OUT (RJ45 connector):

- 1. DMX output for controller functions and software updates
- 2. DMX input for DMX tester function
- USB:
 - 1. Power supply and battery charger
 - 2. Software updates from PC

2.2 Hardware Characteristics

Power Supply	Lithium battery. USB connection also provides battery recharge.
	2 x AA Rechargeable batteries
	ATTENTION: USE ONLY RECHARGEABLE BATTERIES!
	DON'T USE NOT RECHARGEABLE BATTERIES!
Multimedia Card	Micro-SD card stores software updates.



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3 User Functions

3.1 Power on/off

Turn on the DLC901 by pressing the POWER ON button at top right. After few seconds, display goes into a "screen saver" mode reducing luminosity. If the user does not press keys, after a minute, DLC901 automatically goes off. Turn off the DLC901 using menu option "Shut Down". Reset by pressing and holding ENTER for 10 seconds.

3.2 Main menu

Upon start up, the DLC901's main menu appears. Each menu option may include a submenu (identified by an arrow \Rightarrow on the right-hand side of the display), an action command (also indicated by an arrow) or an input field (a number or option appears on the right-hand side of the display).

Menu options are activated as follows:

- Scroll: press \blacktriangle (2) or \blacktriangledown (8).
- Return: press BACK.
- Submenu: select menu item and press ENTER.
- Modify: press ENTER then modify the highlighted item using they keypad, or scroll to the desired option using ▲ or ▼. Press ENTER to confirm the modification or BACK to cancel.

3.3 Identification and remote control of fixtures

Identification and remote control functions are accessed in the "Device List" sub menu. Fixtures must be connected to DMX and to the DLC901's DMXIN/OUT connector; then the "Device List" menu displays all connected fixtures.

Scroll to and select a fixture to access the fixture's setup menu. Navigate the fixture's menu as follows:

- Scroll: press ▲/▼
- Modify: select menu item, press ENTER and $\blacktriangle/ \blacktriangledown$, then make changes. Press ENTER to confirm or BACK to cancel.

Refer to the fixture's user manual for details about menu structure and functions.

- Press BACK to exit the Device List menu.

3.4 **Programming fixtures**

Programming is done in two phases:

- 1) Download software from a PC to the DLC901
- 2) Download software from the DLC901 to the fixture

3.4.1 Download from PC to DLC901

To complete the first phase, a PC with Windows operating system is required.

Connect the PC to the DLC901 using standard USB cable. Launch the programming software, and a window appears on the PC, providing a list of software update files (software update files are available from the fixture's manufacturer). Select the desired file and upload to the DLC901, which then stores the program in internal memory. The DLC901's display shows progress and the program is saved into the micro-SD card.

The software update may also be saved to the folder of the micro-SD card inserted into the micro-SD Reader connected to the PC. Micro-SD must be formatted in FAT or FAT32.

3.4.2 Download from DLC901 to fixtures (micro-SD card is required)

For the second phase, connect the DLC901 (using DMX IN/OUT connector) to the fixture using standard DMX cable and select "DeviceRepr" on the menu. The software program that was downloaded to the DCL901 during phase one will then be uploaded to the fixture.

The program shows the software updates previously stored on the micro-SD card. Press \blacktriangle/∇ and select the desired program to be uploaded to the fixture and confirm by pressing ENTER.

3.5 DMX Out

The "Dmx Out" function allows direct command of up to 512 DMX channels. Connect fixtures to the DLC901 via DMX IN/OUT connector. When "Dmx Out" appears on the display, press ENTER, and the DMX channels with relative values are displayed. Scroll $\triangleleft/\triangleright$ to select "Channel" or "Value" and confirm by pressing ENTER. Now press $\blacktriangle/\blacktriangledown$ to select or to modify the number and press ENTER to complete. The result will occur in real time as the connected fixtures react to the command. To exit, press $\blacktriangle/\blacktriangledown$ until "Exit" is displayed, and then press ENTER.

3.6 DMX Tester

To activate DMX Tester function, choose menu item "Dmx In". Current DMX values are displayed. Press $\triangleleft/\triangleright$ to change channels value. Press $\triangleleft/\blacktriangledown$ to jump 8 channels forward or back.

"---" indicates the not received channels. To exit from this function press ENTER.

3.7 RDM Master (menu item "RDM Dev.")

DLC901 automatically identifies RDM fixtures connected to the DMX IN/OUT connector. By pressing ENTER on the menu item "RDM Dev." will appear the list of all connected fixtures. Scroll with $\blacktriangle/\blacksquare$ to select one fixture which needs to be identified (RDM Command "IDENTIFY ON"). Press ENTER to see or to change the fixture parameters: DMX address and DMX mode.

3.8 Custom Discovery (menu item "CustomDev")

DLC901 automatically identifies fixtures connected to the DMX IN/OUT connector.

By pressing ENTER on the menu item "CustomDev" will appear the list of all connected fixtures. Scroll with $\blacktriangle/\blacksquare$ to select one fixture which it can be identified by activating one of its functions, for example with the turning on of its LEDs.

Press ENTER to see or to change the fixture parameters which depend to the fixture model.

Refer to the fixture's user manual for details about menu structure and functions.

4 Description of Menus

All menu items are described below. Each menu option may include a submenu (identified by an arrow \Rightarrow on the right-hand side of the display), an action command (also indicated by an arrow \Rightarrow) or an input field (a number or option appears on the right-hand side of the display).

Menu options are activated as follows:

- Scroll: press ▲(2) or ▼(8).
- Return: press BACK.
- Submenu: select menu item and press ENTER.
- Modify: press ENTER then modify the highlighted item using they keypad, or scroll to the desired option using ▲ or ▼. Press ENTER to confirm the modification or BACK to cancel.

- **CustomDev (menu)**: lists all fixtures connected to the DLC901 via DMX:

– **Device1, Device 2, ...** : lists all fixtures and allows selection of one fixture.

Once ENTER is pressed are shown all the current parameter of the selected fixture. Refer to the fixture's user manual for details about menu structure and functions.

- **RDM Dev. (menu)**: lists all RDM fixtures connected to the DLC901 via DMX:

– **Device1, Device 2, ...** : lists all RDM fixtures and allows selection of one fixture.

Once ENTER is pressed are shown the current DMX address and DMX mode of the selected fixture.

- **Dmx Out (menu)**: allows individual command of all 512 DMX channels:
 - select between "Channel" and "Value" with ◀/▶ and press ENTER to confirm
 - modify the DMX channel or value using $\blacktriangle/ \triangledown$ to select the number and press ENTER to confirm.
 - press ENTER again or BACK to exit
- Dmx In: DMX Tester (menu):
 - select DMX channels to analyze using \blacktriangle/∇ . Use $\blacktriangleleft/\triangleright$ to jump 8 channels forward or back.
 - press BACK to exit
- DeviceRepr (menu): allows transmission of software updates stored on multimedia card to connected fixtures.
 - press $\blacktriangle/ \blacksquare$ to select one software update
 - press ENTER to confirm the upload
 - press BACK to cancel
- Options (menu):
 - **Battery:** shows the battery voltage (V).
 - Info: display's version of DLC901.
 - **Reserved:** only for technical personnel.
- **ShutDown (menu)**: turns off DLC901.

5 Revisions

First version: 1.05