

# MANUAL





#### Table of contents

Warning	
Unpacking Instructions	
Safety Instructions	
Operating Determinations	4
Return Procedure	4
Claims	4
Description of the device	5
Frontside	5
Backside	
Installation	7
Set Up and Operation	7
Battery Charging	7
Main Menu Options	7
Control Modes	
1. DMX Packet Test	
1.1. Data Format	
1.2. Data Timing	9
1.3. Data Level (Volt)	9
2. DMX DataRX	10
2.1. Barchart Display	10
2.2. Value Display	11
2.3. Min / Max Display	
3. DMX DataTX	12
3.1. Modify Channel	12
3.2. Single Channel	
3.3. Color Mode	
3.4. Chase Mode	15
4. RDM Tester	16
5. DMX1000KRX	
6. DMX1000KTX	17
7. Moving Light	18
7.1. Library Setting	18
7.2. Play Mode	18
8. Cues Save/Run	19
8.1. Save Cue	19
8.2. Run Cue	19
9. Cable Test	
10. MIDI DataRX	
11. System Setup	
11.1. DMX & RDM Settings	
11.2. Display Setting	
Function buttons	
Back-up/Update Mode	
MODE button	
LABEL button	
RESET button	
COPY button	
BACKUP button	
CAL button	
INFOR button	
UPDATE button	
F1/F2 Buttons	



# **RDM** Commander

Maintenance	26
Troubleshooting	26
No Response to DMX/RDM	26
Product Specifications	26
Notes	29



# Warning



For your own safety, please read this user manual carefully before your initial start-up!



# **Unpacking Instructions**

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

## Your shipment includes:

- Showtec RDM Commander
- 1 x flight case
- 9V DC, 500mA power adapter + plug adapters
- User manual





CAUTION! Keep this device away from rain and moisture! Unplug mains lead before opening the housing!



# **Safety Instructions**

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual

Before the initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes contained in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

# **IMPORTANT:**

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never remove warning or informative labels from the unit.
- Do not open the device and do not modify the device.
- Do not disconnect and reconnect the device in short intervals, as this would reduce the device's life.
- Only use the device indoors, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Always remove the batteries, when the device is not used or before cleaning!
- Make sure that the device is not exposed to extreme heat, moisture or dust.

Ordercode: 50405



# **RDM Commander**

- If the device is dropped or struck, have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

## **Operating Determinations**

- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The maximum ambient temperature  $t_a = 35^{\circ}C$  must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 35° C.
- If this device is operated in any other way than the one described in this manual, the product may suffer damages and the warranty becomes void.

You endanger your own safety and the safety of others!



# 🛕 Return Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail <u>aftersales@highlite.nl</u> and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

# Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 01) Your name
- 02) Your address
- 03) Your phone number
- 04) A brief description of the symptoms

## Claims

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to report and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless agreed otherwise in writing.

Complaints against us must be prepared in writing or sent by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement from which the obligation is resulting.



# Description of the device

#### Features

The Showtec RDM Commander is an RDM tester. It allows to test all the parameters and is fully compatible with DMX-512 and DMX-1000K protocols.

- Power supply: 9V DC, 500mA power adapter
- Power consumption: 5W
- Control protocols: DMX-512, DMX-1000K, RDM
- Onboard: 4 x 20-character LCD display
- Connections: 3-pin/5-pin XLR IN&OUT
- Housing: PVC
- Dimensions: 135 x 73 x 208 mm (LxWxH)
- Weight: 0,6 kg

#### **Flight case**

- Dimensions: 265 x 255 x 90 mm (LxWxH)
- Weight: 1,1 kg

#### Frontside



01) LCD display

- 02) Jog wheel
- 03) Function buttons

Fig. 01



## Backside





- 04) LED power indicator
- 05) 9V DC power adapter IN
- 06) 5-pin DMX/RDM signal connector IN
- 07) 3-pin DMX/RDM signal connector IN
- 08) 5-pin DMX/RDM signal connector OUT
- 09) 3-pin DMX/RDM signal connector OUT
- 10) Power switch ON/OFF
- 11) Micro SD slot

Fig. 02

# Installation

Remove all packing materials from the RDM Commander. Check if all foam and plastic padding is removed. Connect all cables.

Always remove the batteries before cleaning and/or servicing or if the device is not used for a longer period of time. Damages caused by non-observance are not subject to warranty.

# Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

## **Battery Charging**

- 01) Connect the included power adapter to the power adapter input on the RDM Commander **(05)** and plug the other end of the cable to the appropriate mains power supply.
- 02) It will now take about 3-5 hours to recharge the battery. Then, it is possible to use the RDM Commander wireless. The batteries will last up to 6-8 hours.
- 03) Unplug the device and move the power switch (10) to ON position.
- 04) The device is now ready for use.

#### **Main Menu Options**

01) Turn the jog wheel to select one the following menu options:

≤DMX Packet Test	>
DMX dataRX	>
DMX dataTX	>
RDM Tester	>
DMX1000KRX	>
DMX1000KTX	>
Moving Light	>
Cues Save/Run	>
Cable Test	>
MIDI dataRX	>
System Setup	>

- 02) Once you have chosen your desired menu, press the jog wheel to open.
- 03) If you want to edit the parameters, turn the jog wheel.
- 04) If you want to return to the previous screen, turn the jog wheel to select the return symbol ≤ and press the jog wheel.
- 05) The display will now show the previous menu screen.
- 06) You can repeat steps 1-3 to navigate through all the existing menus.

# **Control Modes**

## 1. DMX Packet Test

With this menu, you can monitor the data format, time and voltage level of the signal received from the connected DMX device.

- 01) Select DMX Packet Test and open the menu.
- 02) The display will show:

≤DMX Packet Test:	
1. Data Format	>
2. Data Timing	>
3. Data Level (Volt)	>

03) If you now select one of the 3 submenus (**Data Format**, **Data Timing** or **Data Level**) and try to open them, while there is no signal input, the display will show:

≤DMX Packet Test: Receive No Signal ?

04) Select the question tag and open help menu. The display will show:

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

05) However, if there is signal input, the menus will be fully accessible.

#### 1.1. Data Format

- 01) Select Data Format and open the menu.
- 02) Now it is possible to view information about the total amount of channels of the connected DMX fixture, as well as the information about Break status, when receiving signal.

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

03) If you select the question tag and open help menu, the display will show:

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

04) Now, you can return to the previous menu.

#### 1.2. Data Timing

- 01) Select Data Timing and open the menu.
- 02) Now it is possible to view all the parameters of the received DMX signals (Break, Mask B\$S, start code, channel time and period time).

≤Start Code:	000 ?	
Break:	100us	
Mask B\$S:	10us	
Chan. time:	48us	>

- 03) If you select **Chan. time** and open the menu, the display will show **Period Time** information.
- 04) Now, you can return to the previous menu.

#### 1.3. Data Level (Volt)

- 01) Select Data Level (Volt) and open the menu.
- 02) Now it is possible to view information about the signal voltage:



03) If you select the question tag and open help menu, the display will show:

≤Data level:
Reception may still
be possible with
lower levels.

04) Now, you can return to the previous menu.



#### 2. DMX Data--RX

With this menu, you can monitor the value of input signal, depending on the chosen display mode (see page 21).

- 01) Select DMX Data--RX and open the menu.
- 02) The display will show:

≤DMX data RX:	
1. Barchart display	>
2. Value display	>
3. Min/ max display	>

- 03) In **Normal** display mode, the channel values on the display will change accordingly to the changes made with another DMX controller.
- 04) In **Hold** display mode, the channel values on the display will not change, regardless of the changes made with another DMX controller.

#### 2.1. Barchart Display

- 01) Select Barchart display and open the menu.
- 02) If there is no signal input, the display will show:



- 03) Each line indicates 10 channels, in total. Turn the jog wheel to select > and press the jog wheel to proceed.
- 04) If there is signal input, the display will show the values of the received signals in the form of a bar chart:



05) If you select the question tag and open help menu, the display will show the information about different fader values:

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

#### 2.2. Value Display

- 01) Select Value display and open the menu.
- 02) Now you can view the signal input values in 3 formats: decimal, hexadecimal and percents.
- 03) If there is no signal input, the display will show:



04) If there is signal input, the display will show the channel values in the form of a diagram:



- 05) The channels are set by default to 000, while the starting channel is always set to 001.
- 06) If you want to change the starting channel, select the > in the right upper corner of the display and press the jog wheel.
- 07) Now, turn the jog wheel to set the new value. The adjustment range is between 001-512.
- 08) Press the jog wheel again, to save changes.
- 09) If you want to toggle between the 3 display formats (decimal, hexadecimal and percents), select the > in the left lower corner of the display and press the jog wheel.
- 10) Now turn the jog wheel to choose the desired display format.
- 11) Press the jog wheel again, to save changes.

#### 2.3. Min / Max Display

- 01) Select Min/Max display and open the menu.
- 02) Now you can view all the values in a simple manner. The display will show:
  - Minimum adjustment value of the current channel
    - Actual channel value
    - Maximum adjustment value of the current channel



03) If there is no signal input, the display will show:



- 04) In order to browse through the values of each channel, turn the jog wheel to select > in the third text line on the display and press the jog wheel to open.
- 05) Turn the jog wheel to the left or right to set the desired value.
- 06) Select the > in the fourth text line and press the jog wheel to reset the current value.

#### 3. DMX Data--TX

With this menu you can set the operation priority for the device. You can disable the incoming DMX signal, so that it does not have any influence upon the current device's status.

- 01) Select **DMX Data--TX** and open the menu.
- 02) The display will show:

≤1. Modify Ch	annel >
2. Single Cha	annel >
3. Color Moc	le >
4. Chase Mo	de >

#### 3.1. Modify Channel

01) Select Modify Channel and open the menu. The display will show:

≤1.512 Chan	nel ?
Mode: Modi	fy Mode
Chan: 001	>
Data: \$00=	=00% >
≥ [001010]	] CLR>
\$00 \$00 \$0	00 \$00 \$00
\$00 \$00 \$0	00 \$00 \$00
Cue:01>	Save Cue>

- 02) This menu displays the values of all 512 channels. It can also be used for temporary adjustment of the chosen channels, while the actual channel values remain unchanged.
- 03) Now you have the following options to choose from:
  - **Chan**: Set the desired channel.
  - Data: Set the output level for the desired channel.
  - **CLR**: Discard the previously made adjustments.
  - Cue and Save Cue: Save the current output value as a cue. A maximum of 99 cues can be saved.
- 04) Select Chan: 001 and press the jog wheel.
- 05) Turn the jog wheel to choose the channel which you want to edit. The adjustment range is between 001-512. Press the jog wheel to confirm your choice.
- 06) Select **Data** and press the jog wheel to proceed.
- 07) Now turn the jog wheel to set the output value. The adjustment range is between 0-100%. Press the jog wheel to save changes.
- 08) Turn the jog wheel clockwise to proceed to the second menu screen.
- 09) Select > in the left upper corner of the display and press the jog wheel.
- 10) Turn the jog wheel to select the desired channel range. The adjustment range is between 001-512.
- 11) Press the jog wheel to confirm your choice.
- 12) Turn the jog wheel clockwise to select the desired channel:

≥ [ <u>0</u> 0101(	נכ	CLR>		Channel 1
	ւսս ես			Channel 5
200 200 3	DO 20			- Channel 10
Cue:01>	Sav	e Cue>		
			1	

- 13) Press the jog wheel to proceed to edition.
- 14) Turn the jog wheel to set the output for the chosen channel. The adjustment range is between 00-FF (full output).
- 15) Press the jog wheel to save changes.
- 16) Select **Cue** and press the jog wheel to proceed to edition.
- 17) Turn the jog wheel to set the cue number. The adjustment range is between 01-99. Once you have chosen the desired cue number, press the jog wheel to confirm your settings.
- 18) Select Save Cue and press the jog wheel.
- 19) Your cue has just been saved.

#### 3.2. Single Channel

01) Select **Single Channel** and open the menu. The display will show:



- 02) This menu displays the values of only one channel at a time.
- 03) Now you have the following options to choose from:
  - Auto Speed: Set the desired speed, from 1-10. It works properly only if Mode is set to Auto ON/OFF.
  - **Chan**: Set the desired channel.
  - **Mode**: Set the desired output mode.
  - Data: Set the output level for the desired channel.
  - **Cue** and **Save Cue**: Save the current output value as a cue. A maximum of 99 cues can be saved.
- 04) Select Chan: 001 and press the jog wheel.
- 05) Turn the jog wheel to choose the channel which you want to edit. The adjustment range is between 001-512 and 01-512 (all channels at once). Press the jog wheel to confirm your choice.
- 06) Select Mode and press the jog wheel to proceed.
- 07) Turn the jog wheel to select one of the 4 modes:
  - Fader Only: You can change the output value by turning the jog wheel, between 0-255.
  - Auto ON/OFF: The output value will change automatically while adjusting speed.
  - **Ramping**: The output value will change gradually from 0-255, along with the speed. Then the process will repeat.
  - **Stop**: The output value cannot be changed.
- 08) Press the jog wheel to choose your desired mode.
- 09) Select **Data** and press the jog wheel to proceed.
- 10) Turn the jog wheel to set the output value. The adjustment range is between 0-100%. Press the jog wheel to save changes.
- 11) Turn the jog wheel clockwise to proceed to the second menu screen.
- 12) Select **Cue** and press the jog wheel to proceed to edition.
- 13) Turn the jog wheel to set the cue number. The adjustment range is between 01-99. Once you have chosen the desired cue number, press the jog wheel to confirm your settings.
- 14) Select Save Cue and press the jog wheel.
- 15) Your cue has just been saved.

#### 3.3. Color Mode

01) Select **Color Mode** and open the menu. The display will show:

≤3. Color Mode	?
Pixel: 8Bit-1Color	>
Start Chan: 001	>
Master Level: \$FF	>
≥Auto Speed: 01	>
Fade Time: 100%	>
Cue:01> Save	Cue>

- 02) Now you have the following options to choose from:
  - **Pixel**: You can select either an 8-bit or 16-bit light effect (each consists of 9 colors). If you have selected a 16-bit light effect, you can set the order of the **Coarse** and **Fine** channels (see page 21).
  - Start Chan: Set the starting address of the first light effect, from 001-512.
  - Master Level: Set the maximum value of the DMX output, from 0-255.
  - Auto Speed: Set the data speed, from 1-10.
  - Fade Time: Set the data fade time ratio, from 0-100.
  - Cue and Save Cue: Save the current output value as a cue. A maximum of 99 cues can be saved.
- 03) Select the desired option and press the jog wheel to proceed.
- 04) Turn the jog wheel to adjust the desired option and press the jog wheel to save changes.
- 05) Set the Auto Speed to 0. The display will show:



- 06) Now, you can modify the speed manually.
- 07) Select Go and press the jog wheel. The data will change with every single press of Go.
- 08) Select **Cue** and press the jog wheel to proceed to edition.
- 09) Turn the jog wheel to set the cue number. The adjustment range is between 01-99. Once you have chosen the desired cue number, press the jog wheel to confirm your settings.
- 10) Select Save Cue and press the jog wheel.
- 11) Your cue has just been saved.



This menu works only if there is no DMX input.





#### 3.4. Chase Mode

01) Select Chase Mode and open the menu. The display will show:

≤4. Chase Mode	
Pixel: 8Bit-1Color	>
Total Pixel: 100	>
Pixel/Group: 001	>
≥Jump Pixel: 001	>
Test Color: All	>
Start Chan: 001	>
Master Level:&FF	>
Fade Time: 100%	>
Cue:01> Save	Cue>

02) Now you have the following options to choose from:

- Pixel: You can select either an 8-bit or 16-bit light effect (each consists of 9 colors). If you have selected a 16-bit light effect, you can set the order of the Coarse and Fine channels (see page 21).
- Total Pixel: Set the range, between 001-512.
- **Pixel/Group**: Set the number of light effects, within the range set in **Total Pixel**.
- Jump Pixel: Set the number of light effects, which switch within the range set in Pixel/Group.
- Test Color: Set the light effect functions, which you want to test.
- Start Chan: Set the starting address of the first light effect, from 001-512.
- **Master Level**: Set the maximum value of the DMX output, from 0-255.
- Auto Speed: Set the data speed, from 1-10.
- Fade Time: Set the data fade time ratio, from 0-100.
- Cue and Save Cue: Save the current output value as a cue. A maximum of 99 cues can be saved.
- 03) Select the desired option and press the jog wheel to proceed.
- 04) Turn the jog wheel to adjust the desired option and press the jog wheel to save changes.
- 05) Set the Auto Speed to 0. The display will show:



- 06) Now, you can modify the speed manually.
- 07) Select Go and press the jog wheel. Each press of Go will cause the cues to switch.
- 08) Select **Cue** and press the jog wheel to proceed to edition.
- 09) Turn the jog wheel to set the cue number. The adjustment range is between 01-99. Once you have chosen the desired cue number, press the jog wheel to confirm your settings.
- 10) Select Save Cue and press the jog wheel.
- 11) Your cue has just been saved.



This menu works only if there is no DMX input.



#### 4. RDM Tester

With this menu you can test RDM functionality of the connected devices.

- 01) Select **RDM Tester** and open the menu.
- 02) If there is no RDM signal input, the display will show:

Second O RDM devices Please exit!

03) If there is RDM signal input, the display will show:



- 04) Now you have the following options to choose from:
  - Total device: The total number of the connected RDM devices.
  - **Device:** The currently active device.
  - **Device\_Inform:** The properties of the device.
  - Get: Get/Set a command.
- 05) Select the desired menu and press the jog wheel to open.
- 06) Select Get and press the jog wheel to open the menu. The display will show:



- 07) Now you have 2 options to choose from:
  - **UID**: View the device's ID.
  - **Device\_Info**: View details of all of the device's parameters (45 in total).
- 08) Select the desired menu and press the jog wheel to open.
- 09) Select **Command: Get** and press the jog wheel.
- 10) Turn the jog wheel to select **Command: Set**. The display will show:



- 11) Now you have 2 options to choose from:
  - **UID**: Select the device which you want to set a command for.
  - DMX\_START ADDRESS: Set the value for each parameter (28 in total).
- 12) Select the desired menu and press the jog wheel to open.

#### Notes:

- 01) In **Command: Get**, if you have chosen **UID**, the number of IDs is limited to 45.
- 02) In **Command: Set**, if you have chosen **UID**, the number of IDs is limited to 28.
- 03) You can carry out GET "DMX\_PERSONALITY\_DESCRIPTION," GET "SENSOR\_DEFINITION" and GET "SENSOR\_VALUE" only if perform GET "STATUS\_MESSAGES" first.
- 04) You can GET or SET the relevant parameter ID only if you perform GET "PARAMETER\_DESCRIPTION" first.
- 05) You can carry out GET "STATUS-ID\_MESSAGES" only if you perform GET ""STATUS\_MESSAGES" first.

## 5. DMX1000K--RX

- 01) Select DMX1000K--RX and open the menu.
- 02) The display will show:

≤DMX1000K RX:	
1. Barchart display	>
2. Value display	>
3. Min/ max display	>

03) This mode can be used in the way similar to **DMX Data--RX** mode. See page 10.

## 6. DMX1000K--TX

- 01) Select **DMX1000K--TX** and open the menu.
- 02) The display will show:

≤1. Modify Channel	>
2. Single Channel	>
3. Color Mode	>
4. Chase Mode	>

03) This mode can be used in the way similar to DMX Data--TX mode. See page 12.



#### 7. Moving Light

With this menu you can set the function of each fixture's channel.

- 01) Select Moving Light and open the menu.
- 02) The display will show:

≤Moving Light: 1. Library Setting	>
2. Play Mode	>

03) Select the desired menu and press the jog wheel to open.

#### 7.1. Library Setting

01) If you have opened Library Setting, the display will show:

≤1. Library Setting	
Fixture No.: 01	>
Fix Name: fix_01	>
↑>AttrO1: Pan	>
↑Precision: 8bit	>
High Chan.: 01	>
Low Chan.:	>
Confirm	>

02) Now you have the following options to choose from:

- **Fixture No.**: Select the light effect which you want to edit (32 in total).
- **Fix Name**: Set the name of the light effect (8 characters).
- Attr01: Select the reference numbers for the fixture's functions (36 in total).
- **Pan**: Select the name of the reference number (45 in total).
- **Precision**: Select the light effect's resolution: 8-bit/16-bit.
- 03) Turn the jog wheel to select the desired menu and press the jog wheel to open.
- 04) If you have set **Precision** to 16-bit, you can control the light effect by means of **High Chan.** and **Low Chan.**
- 05) If you have set Precision to 8-bit, you can control the light effect only by means of High Chan.
- 06) Select **Confirm** and press the jog wheel to save your changes.

#### 7.2. Play Mode

01) If you have opened Play Mode, the display will show:

≤Fixture.:fix_01	>
Start Address: 001	>
Attribute: Pan	>
DMX Level: 000	>

- 02) With this menu you can test the connected light effects, using the preset parameters.
- 03) You have the following options to choose from:
  - Fixture.: Set the name of the light effect.
  - Start Address: Set the right starting address.
  - Attribute: Set the light effect's function (Pan, Tilt, Color, Gobo etc.)
  - **DMX Level:** Set the DMX value for the chosen light effect's function channel.

Show M

#### 8. Cues Save/Run

With this menu, you can save and run cues. If **there is DMX signal input**, the device will save it as a cue. If **there is no DMX signal input**, the previously saved cues will be overwritten with a new one. You can save up to 99 cues.

#### 8.1. Save Cue

01) Select Cues Save/Run and open the menu. The display will show:

≤Cues (Scene):1. Save Cue(Scene)2. Run Cue(Scene)

02) Select Save Cue(Scene) and press the jog wheel to save a cue. The display will show :



- 03) Select **As Cue No.:** and press the jog wheel. Then turn the jog wheel to assign the cue number which you are about to save.
- 04) Select **Save** and press the jog wheel to confirm.

#### 8.2. Run Cue

01) Select **Run Cue(Scene)** and open the menu. The display will show:

≤Run More Cue:	
Start: 01> End:99	} >
Run speed: 01	>
Fade Time: 100%	>

- 02) Now you have the following options to choose from:
  - **Start:** and **End:** Set the desired cue, between 1-99.
  - **Run speed:** Set the cue running speed, between 1-10.
  - Fade Time: Set the fade time between cues, between 0-100%.
- 03) Select the desired menu and press the jog wheel to open.
- 04) If you set **Run speed** to 0, you can set the speed manually. The display will show:



05) Select Go and press the jog wheel. Each press of Go will cause the cues to switch.

#### 9. Cable Test

With this menu you can check whether the cabling is damaged.

01) Select **Cable Test** and open the menu. The display will show:

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

- 02) Connect a DMX cable to the DMX IN and OUT signal connectors on the device (06/07/08/09 on p.6).
- 03) Select **Press OK** and press the jog wheel to start the test.
- 04) If the cable is damaged, the display will show:

≤----Cable Test----Test Result: >>Cable failure!

05) If the cable is OK, the display will show:

≤----Cable Test----Test Result: >>Cable OK

#### 10. MIDI Data--RX

With this menu you can receive MIDI signals and view them on the display.

01) Select MIDI data--RX and open the menu. The display will show:



- 02) The speed of data change depends on the number of received MIDI signals. The larger the number, the faster the change speed.
- 03) If there is no MIDI signal input, data will not change.



#### 11. System Setup

With this menu you can set the device's settings.

- 01) Select **System Setup** and open the menu. The display will show:
  - <System Setup:
    - 1. DMX&RDM Setting
    - 2. Display Setting
- 02) Select the desired menu and press the jog wheel to open.

#### 11.1. DMX & RDM Settings

- 01) Select DMX&RDM Settings and press the jog wheel to open. The display will show:
  - ≤DMX&RDM Setting ?
    TX Start Code: 000 >
    RX Start Code: 000 >
    Max Level: Normal >
    Auto Identify OFF >
    16bit:Coarse first >
    Confirm >
- 02) Now you have the following options to choose from:
  - **TX Start Code:** Set the starting value for DMX signal transmission. The adjustment range is between 0-255. This option has influence on DMX Data--TX mode. See page 12.
  - **RX Start Code:** It is set by default to 000. The adjustment range is between 0-255. If you choose **All**, the device will be able to receive all kinds of signals.
  - Max Level: Select Normal or Hold. If you have chosen Normal, the device will display all received DMX data. If you have chosen Hold, the device will display only the highest value for each channel.
  - Auto Identify: Select ON or OFF. If you have chosen ON, the light effect will send identification order to the device in DMX Tester function. If you have chosen OFF, the light effect will not send any identification order.
  - 16bit: Select Coarse first or Fine first. You should choose a 16-bit light effect in Chase Mode and Color Mode (see pages 14-15) for this function to work.
- 03) Select the desired menu and press the jog wheel to open.
- 04) Select **Confirm** and press the jog wheel to save your changes.

#### 11.2. Display Setting

01) Select **Display Setting** and press the jog wheel to open. The display will show:

≤Contrast Level: 08	>
Backlight: ON	>
Display: Decimal	>
Confirm	>

- 02) Now you have the following options to choose from:
  - Contrast Level: Set contrast. The adjustment range between 1-10, from low to high contrast.
  - **Backlight:** Switch the backlight **ON** or **OFF**.
  - **Display:** Set the display format (decimal, hexadecimal or percents).
- 03) Select the desired menu and press the jog wheel to open.
- 04) Select **Confirm** and press the jog wheel to save your changes.



# **Function buttons**

The device is equipped with 12 function buttons.



#### Back-up/Update Mode

In order to carry out an update or to back your files up, you will need a micro SD card.

- 01) Open the micro SD card on your PC.
- 02) In the root folder, create a new subfolder and name it rdm\_commander.
- 03) Copy the update files to the newly created folder.
- 04) Eject the micro SD card and place it in the slot on the RDM Commander.
- 05) Switch the RDM Commander on by moving the power switch (10) to ON position.
- 06) Press the **RDM** button. The device will search for RDM-supporting devices.
- 07) Press the ADDR button to access starting address settings. The display will show:



- 08) Now you have the following options to choose from:
  - **Device:** Displays the total number of found devices.
  - **SL PAR 130:** The name of the current device.
  - Addr: Set the RDM starting address.

09) Once you have set everything, select **Set** and press the jog wheel to save the settings.

#### Fig. 03



#### MODE button

Press the button to set the operation mode of the light effect.

01) Press the **MODE** button to open the menu. The display will show:



- 02) Select **Single Channel Mode/001** and press the jog wheel. Then turn the jog wheel to select the desired operation mode.
- 03) Select Set and press the jog wheel to save changes.

#### LABEL button

Press the button to rename the RDM light effect.

01) Press the LABEL button to open the menu. The display will show:



- 02) Select L: SL PAR 130 and press the jog wheel. Now, by turning and pressing the jog wheel, rename the light effect.
- 04) Select Set and press the jog wheel to save changes.

#### **RESET button**

Press the button to restore the default parameters of the RDM light effect.

01) Press the **RESET** button to open the menu. The display will show:



- 02) Select **Default Set** and press the jog wheel. Turn the jog wheel to choose either **True** or **False**.
- 03) If you choose **True**, select **Set** and press the jog wheel, the default settings will be restored.

#### **COPY** button

Press the button to copy the parameters of the RDM light effect.

01) Press the **COPY** button to open the menu. The display will show:



- 02) Now you have the following options:
  - Source Device: Set the source device.
  - To: Select the target device. (All Same Device: all light effects with the same model number and manufacturer)
- 03) Select Paste and press the jog wheel to copy the parameters.

#### **BACKUP** button

Press the button to back the RDM parameters up.

01) Press the **BACKUP** button to open the menu. The display will show:



02) You can select 2 options:

- Store to Card: Save the files to the micro SD card.
- **Restore from Card:** Upload the files from the micro SD card.
- 03) Select **OK** and press the jog wheel to confirm.

#### CAL button

Press the button to calibrate the color of the RDM light effect. This function can only be used with the light effects with color calibration function.

01) Press the CAL button to open the menu. The display will show:



- 02) Select ON (to activate calibration) or OFF (to cancel calibration).
- 03) Select **Set** and press the jog wheel to confirm.

#### **INFOR** button

Press the button to view the information about the connected RDM light effects.

01) Press the **INFOR** button to open the menu. The display will show:



- 02) Select View Device\_info and press the jog wheel to open the menu.
- 03) The display will show the following information: Protocol version, software version, model ID, footprint, personality, starting address, sub-device number, senor number, product category.

#### **UPDATE button**

Press the button to update the software.

01) Press the **UPDATE** button to open the menu. The display will show:



- 02) Now you have the following options to choose from:
  - Device: Displays the total number of found devices.
  - SL PAR 130: The name of the current device.
  - Filename: Set the desired update file.
- 03) Once you have set everything, select **Update** and press the jog wheel to carry out the update.

#### F1/F2 Buttons

Press these buttons to define the RDM parameter functions.

- 01) Switch the RMD Commander on by moving the power switch (10) to ON position.
- 02) Select RDM Tester mode and press the jog wheel to activate it.
- 03) Select the user-defined RDM parameters (RDM PID ≥0x8000).
- 04) Select **Set** and press the jog wheel to proceed.
- 05) Keep on pressing the **Update** and **F1/F2** buttons simultaneously to define and assign the functions to the respective buttons.
- 06) Now it is possible to call up the desired RDM parameters by pressing the F1/F2 buttons.

# Maintenance

The operator has to make sure that safety-related and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test. The operator has to make sure that safety-related and machine-technical installations are to be inspected by a skilled person once a year.

The electric power supply cables must not show any damages or material fatigue.

The RDM Commander requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe the display clean with glass cleaner and a soft cloth. Do not use alcohol or solvents. Keep connections clean. Disconnect electric power, and then wipe the DMX connections with a damp cloth. Make sure that connections are thoroughly dry before linking equipment or supplying electric power.

# Troubleshooting

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out the following steps.

## No Response to DMX/RDM

Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

- 01) Check the DMX setting. Make sure that DMX addresses are correct.
- 02) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
- 03) Determine whether the RDM Commander or light effect is at fault. Does the RDM Commander operate properly with other DMX/RDM products? If not, take the RDM Commander in for repair. If it operates properly, take the DMX cable and the light effect to a qualified technician.

Model:	Showtec RDM Commander
Power supply:	9V DC, 500mA power adapter
Power consumption:	5W
Dimensions:	135 x 73 x 208 mm (LxWxH)
Weight:	0,6 kg
Details:	
Onboard:	4 x 20-character LCD display
Control protocols:	DMX-512, DMX-1000K, RDM
Connections:	3-pin/5-pin XLR IN&OUT
Housing:	PVC
Max. ambient temperature $t_a$ :	35°C
Max. housing temperature $t_{B}$ :	70°C
Flight case:	
Dimensions:	265 x 255 x 90 mm (LxWxH)
Weight:	1,1 kg

# **Product Specifications**





Design and product specifications are subject to change without prior notice.

CE

Website: <u>www.Showtec.info</u> Email: <u>service@highlite.nl</u>

Ordercode: 50405



RDM Commander
Notes

Ordercode: 50405





©2015 Showtec