OXO
show solutions

USER INSTRUCTION
(T)BOX G2

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOU INITIALLY START-UP

1. In the box

- 1 (T)Box G2
- 1 AC-DC adapter 9V 1200mA,
- 1 DMX adaptor XLR3 to 5 and XLR5 to 3
- 1 Bag

2. Instructions

WARNING

Read the instruction in this manual carefully and thoroughly, as they give important information regarding safety during use and maintenance. Keep this manual with the unit, in order to consult it in the future. If the unit is sold or given to another operator, make certain that it always has its manual, to enable the new owner to read about its operation and relative instructions.

Protect the unit from excessive dryness or humidity (ideal conditions are between 35% and 80%).
To prevent fire or shock hazard, do not expose this product under a high temperature or humidity area.
DO NOT make any inflammable liquids, water or metal objects enter the unit.
Should any liquid be spilled on the unit, DISCONNECT the power supply to the unit immediately.
This product must be earthed.
Take care not to damage the power cord.
After having removed the packaging check that the unit is NOT damaged in any way. If in doubt, DON'T use it and contact an authorized dealer.
NEVER use the unit under the following conditions:
- In places subject to excessive humidity.
- In places subject to vibrations or bumps.
- In places with a temperature of over 45 C/113 F or less than 2 C/35.6 F.
DO NOT open the unit--there are no user serviceable parts inside.
NEVER try to repair the unit yourself. Repairs by unqualified people could cause damage or faulty operation. Contact your nearest dealer.
Wait for at least one second to turn on the power after turning off this unit.
This unit is intended for indoor use only.
Packaging material (plastic bags, polystyrene foam, nails, etc.) MUST NOT be left within children's reach, as it can be dangerous.
STOP using the unit immediately In the event of serious operation problems and either contact your local dealer for a check or contact us directly.
DO NOT dismantle or modify the unit.
If in doubt, DON'T use it and contact an authorized dealer.
This unit must only be operated by adults. DO NOT allow children to tamper or play with it.

3. Features

TBox G2 is a testing tool for LED luminaires. It can be used to test ali the parameters and is fully compatible with DMX-512, RDM and MIDI protocols. This unit can also be used as a RDM controller, it can control fixtures with a RDM protocol.
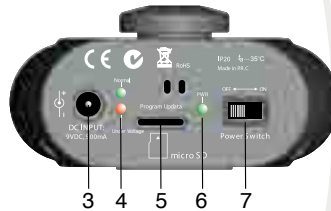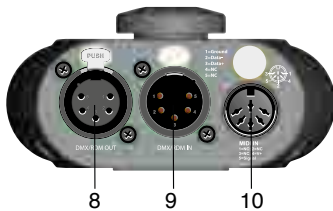
4. Technical specifications

Power supply	9V OC, 500mA power adapter
Power consumption	5W
Control protocols	DMX-512, RDM, MIDI
Connections	5-pin XLR IN&OUT, MIDI, Micro SD slot
Housing	PVC
Dimensions	175 x 105 x 50 mm
Weight	0,28 kg

5. Overview

1. **LCD display**
2. **Jog wheel**
3. **9V DC power adapter IN**
4. **Voltage warning LED indicators**
5. **Micro SD slot**
6. **Power LED indicator**
7. **Power switch ON/OFF**
8. **5-pin DMX/RDM signal connector OUT**
9. **5-pin DMX/RDM signal connector IN**
10. **MIDI IN**

6. Installation

Remove all packing materials from the TBox G2. Check if ali foam and plastic padding is removed. Connect ali cables.
Do not supply power before the whole system is set up and connected properly.
Always disconnect from electric mains power supply before cleaning or servicing.
Damages caused by non-observance are not subject to warranty.

7. Set Up and Operation

Follow the directions below, as they pertain to your preferred operation mode.
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. Connect the device to the main power supply.

Main Menu Option

• Turn the jog wheel to select one of the following menu options:

• Once you have chosen your desired menu, press the jog wheel to open the desired menu.
• If you want to choose one of the submenus, turn the jog wheel.
• Press the jog wheel again to select the desired submenu.
• The display will now show the submenu screen.
• To return to the previous step you have to choose Exit in the submenu.
• You can repeat steps 1-6 to navigate through all the existing menus .

WARNING!!!
Display Off after 30 seconds-30 minutes
When no button is pressed for 30 seconds, 1 min, 2min, 5 min, 10 min or 30min, the display will turn off. You con set this time in menu System setup, see page 18.
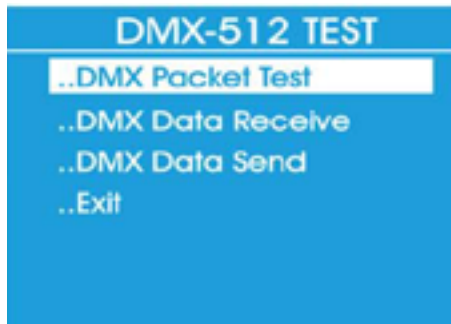To light up the display, you have to press or turn the jog wheel.
Once you have pressed or turned the jog wheel, the display will light up .

8. Control Mode

1 DMX-512
With this menu, you can monitor the total DMX packet of the fixture and test the DMX data signal received from the connected DMX fixture or send to the connected DMX fixture.
• Turn the jog wheel to select DMX-512 test in the main menu.
• Press the jog wheel to open the menu.
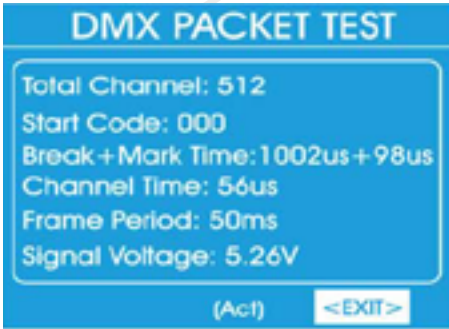• The display shows:

• Select one of the 3 submenus DMX 512 Analyser, DMX 512 Rx or DMX 512 Tx.

1.1 DMX 512 Analyser
• Turn the jog wheel to select DMX 512 Analyser in the DMX-512 test menu.
• Press the jog wheel to open the submenu.
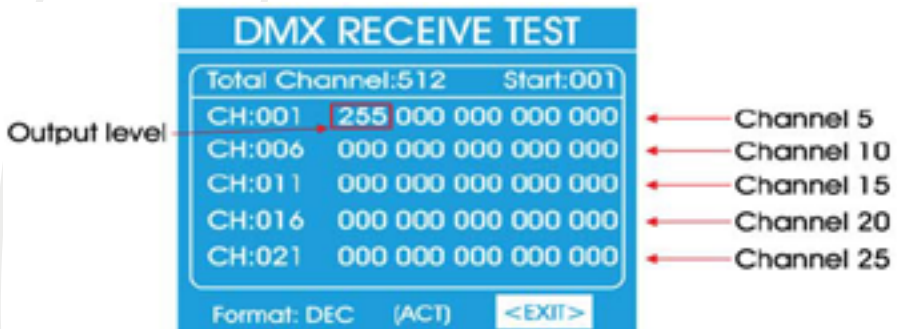• When no signal is received, the display shows:

• If no signal is received, please check the cables and connections.
• If all cables are connected properly and there is a DMX signal, the display shows the specification of the DMX signal, for example:

DMX PACKET TEST

Total Channel: 512
Start Code: 000
Break+Mark Time:1002us+98us
Channel Time: 56us
Frame Period: 50ms
Signal Voltage: 5.26V

(Act)   <EXIT>

• Select Exit to return to the previous submenu. Press the jog wheel to confirm .

1.2 DMX 512 Rx
• Turn the jog wheel to select DMX 512 Rx in the DMX-512 test menu.
• Press the jog wheel to open the submenu.
• The display shows:

• If a DMX signal is received, you con see the output levels in the diagram.
• Turn the jog wheel to select the starting channel (Start:).
• Press the jog wheel to confirm and turn the jog wheel to adjust. The adjustment range is between 001-512.
• To select a display format, turn the jog wheel to select Format. Press the jog wheel to enter the Format option.
• Turn the jog wheel to select Decimal, Percents, BAR (square), RGB (square with RGB color mixing), BRG (square with BRG color mixing) or Hexadecimal.
• Select Exit to return to the previous submenu. Press the jog wheel to confirm.

1.3. DMX 512 Tx

• Turn the jog wheel to select DMX 512 Tx in the DMX-512 test menu.

• Press the jog wheel to open the submenu.

• The display shows:

DMX-512 SEND
...Single Channel Mode
...Multiple Channel Mode
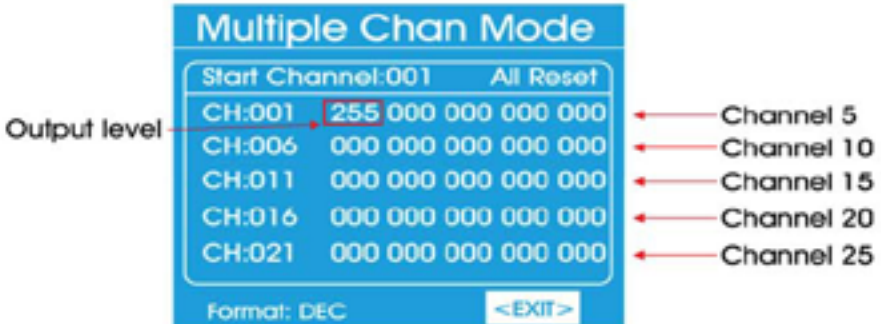...Color Demo Mode
...Chase Demo Mode
...Exit

• Select one of the 4 channel modes, Single Channel Mode, Multi channel Mode, Color Demo Mode or Chase Demo Mode.

• Turn the jog wheel to select Single Channel Mode.

• Press the jog wheel to confirm, the display shows:

Single Chan Mode
Channel: 001
Mode: Fader Only
Channel Level: 255
Speed: level 1
<EXIT>

• In Single Channel Mode you con scroll with the jog wheel through 4 options, Channel, Mode, Channel level and Speed.

• Select Channel to set which Channel a DMX signal is sent to, the adjustment range is between 001- 512 or Ali channels.

  - In the option Mode you can select 4 modes: Fader Only, Auto ON/OFF, Ramping or Stop.

  - 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 the speed.

  - Ramping: The output value will change gradually between 0-255, along with the speed. Then the process will repeat.

  - Stop: The output value cannot be changed.

• The adjustment range of the Channel level (output level) is between 0-255. I I) The adjustment range of the Speed is between level O - level I O.

• Select Exit to return to the previous submenu. Press the jog wheel to confirm.

• Select Multi Channel Mode in the DMX 512 Send submenu, the displays shows:

Multiple Chan Mode

Start Channel:001	All Reset	
CH:001	**255** 000 000 000 000	← Channel 5
CH:006	000 000 000 000 000	← Channel 10
CH:011	000 000 000 000 000	← Channel 15
CH:016	000 000 000 000 000	← Channel 20
CH:021	000 000 000 000 000	← Channel 25
Format: DEC	<EXIT>	

Output level ← (points to 255)

• In this mode you con adjust the starting channel (Start Channel), the display format (Format) and the output level of the DMX channels.

   - Start channel: Turn the jog wheel to set the starting DMX channel, the adjustment range is between 0-51 2.

   - Output level of the channels: Turn the jog wheel to set the output level of the DMX channels, the adjustment range is between 0-255.

   - Format: Turn the jog wheel to change the display format, choose Decimal, Percents, BAR, RGB, BRG or Hexadecimal.

   - To reset the output level of the DMX channels, select Ali Reset. Press the jog wheel to confirm.

   - Select Exit to return to the previous submenu. Press the jog wheel to confirm.

   - Select Color Demo Mode in the DMX 512 Send submenu, the displays shows:

Color Demo Mode

Pixel Type: 8Bit-1Color
Start Channel: 001
Master Level: 255
Speed: Level0
Fade Time: 100%

<EXIT>

• In this mode you can adjust the pixel type, starting channel, master level, speed level or fade time.

   - Pixel type: You can either select an 8-bit or 16-bit fixture (each consists of 9 colors).

   - Start Channel: Set the starting address of the first fixture, between 001-512.

   - Master Level: Set the maximum value of the DMX output, between 0-255.

   - Speed level: Set the data speed, between 0-10 or manual.

   - Fade Time: Set the data fade time ratio, between 0-100%.

• Select Exit to return to the previous submenu. Press the jog wheel to confirm.

• Select Chase Effect Mode in the DMX 512 Send menu, the displays shows:

Chase Demo Mode

Start Chan: 001
Master: 255
Pixel Type: 8Bit-1 Color
Total Pixel: 250
Pixel Group: 001
Jump Pixel: 001
<EXIT>

• You con adjust the starting channel, master level, the pixel type, total pixel, pixel group, jump pixel, Test Color, Speed level or Fade time.
  - Start Channel: Set the starting address of the first fixture, between 001-512.
  - Master: Set the maximum value of the DMX output, between 0-255.
  - Pixel Type: You con either select an 8-bit or 16-bit fixture {each consists of 9 colors).
  - Total Pixel: Set the range, between 001-512.
  - Effect width: Set the number of fixtures, within the range set in Total Pixel.
  - Effect step: Set the number of fixtures, which switch within the range set in Effect width.
  - Test Color: Set the fixture functions, which you want to test.
  - Speed level: Set the data speed, between level 0-10 or ma nuai.
  - Fade lime: Set the data fade time ratio, between 0-100%.
• Select Exit to return to the previous submenu. Press the jog wheel to confirm.
• Select Exit again to return to the main menu. Press the jog wheel to confirm.

2. RDM
With this menu you can obtain info about the connected fixture and you can also control the fixture.
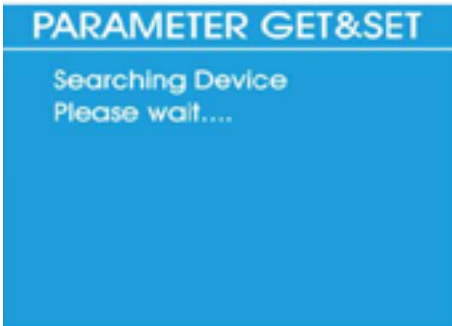• Turn the jog wheel to select RDM Data Test in the main menu.
• Press the jog wheel to open the menu.
• The display shows:

RDM MAIN MENU

..Get&Set RDM Parameter
..Update RDM Device
..EXIT

• Select one of the 2 submenus Get&Set RDM or Update RDM Device.

2.1 Get&Set RDM
• Turn the jog wheel to select Get&Set RDM in the RDM main menu. 02) Press the jog wheel, the display shows:

PARAMETER GET&SET

Searching Device
Please wait....

• If a fixture is not detected, the display shows:

PARAMETER GET&SET

Found 0 RDM Device
Check the power
Please exit to re-try!

<EXIT>

• If no fixture is detected, please check the cables and connections.
• If a fixture is detected, the display shows:

PARAMETER GET&SET

Total Device 1
Device: IPW-150
ID: 29B4 12106-4BD
Para: Identify Device
>Get Paramter
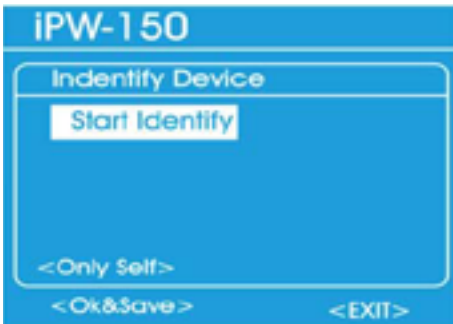>Set Paramter

<EXIT>

• The display shows real-time info about the fixture.

• Turn the jog wheel to select Para, you can obtain info and control the connected fixture.
• The display shows:

PARAMETER GET&SET

Total Device: 1-1
Device: IPW-150
    ID: 2984 1210648D
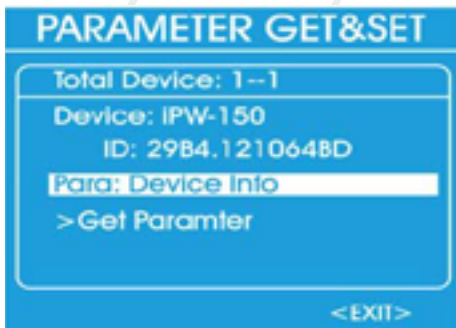**Para: Identify Device**
>Get Paramter
>Set Paramter

<EXIT>

• The parameters that can be selected depends on which fixture is connected. The parameters are for example Indentify Device, Device Info, DMX Start Address etc.
• For example select the parameter Indentify Device. Turn the jog wheel to select Get Parameter or Set Parameter
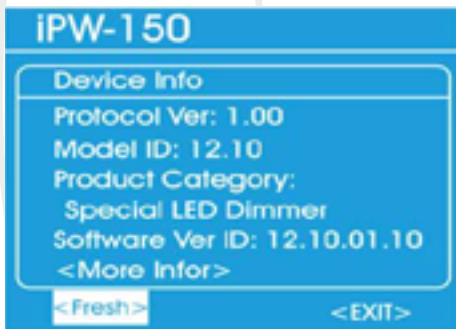• Select Get Parameter and press the jog wheel, the display shows:

IPW-150

Indentify Device
    State: Off

<Fresh>   <EXIT>

• Select Fresh to update the info or Exit to return to the previous submenu.
• Press the jog wheel to confirm.
• Select Set Parameter and press the jog wheel, the display shows for example:
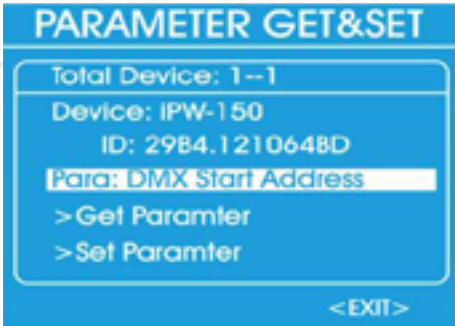
iPW-150

Indentify Device
Start Identify

<Only Self>
<Ok&Save>   <EXIT>

• To start select Start Indentify or Stop Indenitfy to stop the indentification.

• Select Only Self to choose three different options; Only Self, Same mfrs or Ali Device. Select Only self: only the connected fixture will be selected.

  Select Same mfrs: only the same fixtures from the same manufacturer will be selected. Select Ali Device: ali fixtures which are linked to the connected fixture will be selected.

• Turn the jog wheel to select Ok&Save to store this parameter.

• Press the jog wheel to confirm.

• Select Exit to return to the previous submenu. Press the jog wheel to confirm.

• To obtain info about the connected fixture, select the parameter Device Info, the display shows for example:

PARAMETER GET&SET

Total Device: 1--1
Device: IPW-150
   ID: 29B4.121064BD
Para: Device Info
>Get Paramter

<EXIT>

• Turn the jog wheel to select Get parameter.

• Press the jog wheel to confirm, the display shows:

iPW-150

Device Info
Protocol Ver: 1.00
Model ID: 12.10
Product Category:
 Special LED Dimmer
Software Ver ID: 12.10.01.10
<More Infor>

<Fresh>   <EXIT>

• To scroll through the pages select More Infor.

• Select Fresh to update the info or Exit to return to the previous submenu.

• Press the jog wheel to confirm.

• To set the DMX address select the parameter DMX Start Address, the display shows:

PARAMETER GET&SET

Total Device: 1--1

Device: iPW-150

ID: 29B4.1210648D

Para: DMX Start Address

>Get Paramter

>Set Paramter

<EXIT>

- Turn the jog wheel to select Get Parameter or Set Parameter.
- Select Get Parameter and press the jog wheel, the display shows:

iPW-150

DMX Start Address

Channel:301

<Fresh>   <EXIT>

- Select Fresh to update the info or Exit to return to the previous submenu.
- Press the jog wheel to confirm.
- Select Set Parameter and press the jog wheel, the display shows:

iPW-150

DMX Start Address

Channel:301

<Only Self>

<Ok&Save>   <EXIT>

- Press the jog wheel to activate the DMX address.
- Turn the jog wheel to set the DMX address.
- Select Only Self to choose three different options; Only Self, Same mfrs or Ali Device. Select Only self: only the connected fixture will be selected.

• Select Same mfrs: only the same fixtures from the same manufacturer will be selected. Select Ali Device: ali fixtures which are linked to the connected fixture, will be selected.
• Turn the jog wheel to select Ok&Save to store the DMX address.
• Press the jog wheel to confirm.
• Select Exit to return to the previous submenu. Press the jog wheel to confirm.
• Select Exit again to return to the main menu. Press the jog wheel to confirm.

2.2 Update RDM Oevice

Note: Update must be carried out by a qualified and authorized technician.

• Turn the jog wheel to select Update RDM Oevice in the RDM main menu.
• Press the jog wheel, the display shows:

• If no fixture is detected the display shows:

• If the RDM fixture is properly connected, the display shows:

• Insert a Micro SD into the slot (5). Select the firmware file from the connected fixture.
• Turn the jog wheel to select Send: Single device, the display shows:

• Press the jog wheel to confirm Send: Single device.
• Turn the jog wheel to select Single device or Ali devices. Upload the firmware file to the fixture(s).
• Select Exit to return to the previous submenu. Press the jog wheel to confirm.
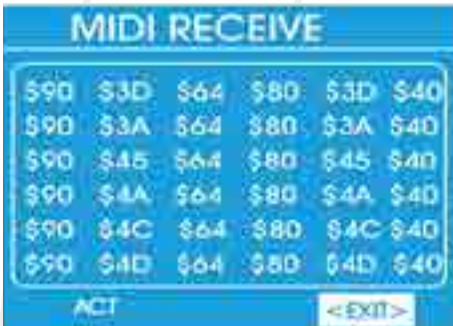• Select Exit a gain to return to the main menu. Press the jog wheel to confirm.

3. MIDI
With this menu you con test the signal of a MIDI fixture.
• Connect a MIDI fixture to the MIDI IN connecter (10).
• Turn the jog wheel to select MIDI Receive in the main menu.
• Press the jog wheel to open the menu.
• The display shows:

- ACT will appear in the left corner.
- If the fixture is detected and a MIDI signal is received, the display shows:

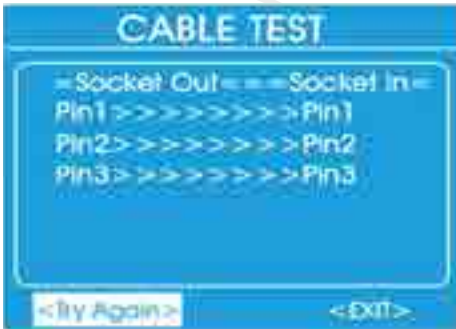- Select Exit to return to the main menu. Press the jog wheel to confirm.

4. Cable test

With this menu you con check whether the cabling is damaged.
- Turn the jog wheel to select CABLE Test in the main menu.
- Press the jog wheel to open the menu.
- The display shows:

- Connect the DMX cable from the XLR IN socket to the XLR OUT socket.
- Turn the jog wheel to select Test.
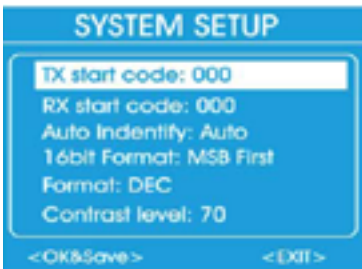- Press the jog wheel to activate the test. If the test is ok the display shows:

- After the test you con select Try again or Exit.
- If you select Try again, the test will be repeated.
- Select Exit to return to the main menu. Press the jog wheel to confirm .

5. System Setup
With this menu you can set the device's settings.
- Turn the jog wheel to select SYSTEM Setup in the main menu.
- Press the jog wheel to open the menu.
- The display shows:

And (if you scroll through the setup menu)

• Turn the jog wheel to scroll through the options to set the TX start code, RX start code, Auto Indentify, 16bit Format, Format, Contrast level, Backlight Off, Auto Mask Oevice, DMX Output When RDM or DMX Output Level Language Software version.

   - TX Start Code: Set the starting value for DMX signal transmission. The adjustment range is between 0-255.

   - RX Start Code: This code is needed when you want to use another RDM tester as transmitter. Both devices have to setup with the same code. It is set by default to 000. The adjustment range is between 0-255. If you choose Ali, the device will be able to receive all start codes.

   - Auto Identify: Select Auto or OFF. If you have chosen Auto, the connected fixture will send an identification order to the TBox G2 in the Get&Set RDM function. If you have chosen OFF, the connected fixture will not send any identification order.

   - 16bit Format: This function con be chosen if you select a I 6 bit fixture in the Color Demo or Chase Demo mode. You con choose between two types of controlling, MSB first or LSB first. MSB: Most Significant Bit (Coarse first) and LSB: Least Significant Bit (Fine first).

   - Format: Select the display format, Decimal, Percents, BAR (square) or Hexadecimal.

   - Contrast Level: Set the contrast of the display. The adjustment range is between I 0-100, from low to high contrast.

   - Backlight Off: The display will turn off when no button is pressed. You con set the time between 30 sec, I min, 2min, 5min, I 0min or 30min.

   - Auto Mask Device: Select ON or OFF. If you choose ON, the connected RDM device will not appear in the overview. When you set its starting DMX address, the other devices without DMX address will appear in the overview. If you choose OFF the connected RDM device will appear in the overview.

   - DMX Output When RDM: Select ON or OFF. If you choose ON, you con keep sending DMX signals together with ROM. If you choose OFF DMX signais will not be sent together with RDM.

   - DMX Output Level: Adjust the max. DMX output level between 0-255, when you choose DMX Output When RDM= ON.

• Language: Allow you to choose between English and French language

• Software version: Give you the version of the software

• Press the jog wheel to activate an option.

• Turn or press the jog wheel to adjust the desired option.

• After adjusting the desired option turn the jog wheel to select OK&Save, the display shows:

SYSTEM SETUP

Format: DEC
Contrast level: 70
Backlight Off: Delay 1min
Auto Mask Device: OFF
DMX Output When RDM: OFF
DMX Output Level: 128

<OK&Save>   <EXIT>

• Press the jog wheel to confirm. The settings will be stored.
• Select Exit to return to the main menu. Press the jog wheel to confirm.

8. Battery use

• The TBox G2 allow you the use of rechargeable battery 4x AAA type 1.5V 1100mA that you can charge with 9V adaptor.
• To put battery juste use the panel at the back of the TBox G2
• Ba carefull and do not use simple battery with 9V adaptor this could be dangerous and could cause damage to the product.

9. 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 TBox G2 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.

10. 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.

11. No Response to DMX/RDM

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

• Check the DMX setting. Make sure that DMX addresses are correct.

• Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.

• Determine whether the TBox G2 or light effect is at fouit. Does the TBox G2 operate properly with other DMX/RDM products? If not, take the TBox G2 in for repair. If it operates properly, take the DMX cable and the light effect to a qualified technician.

Problem	Probable cause(s)	Solution
One or more fixtures do not function at all	No power to the fixture	• Check if power is switched on and cables are plugged in
	Internal fuse blown	• Return the fixture to your dealer
Fixtures reset correctly, but ali respond erratically or not at all to the controller	The controller is not connected. 3-pin XLR Out of the controller does not match XLR Out of the first fixture on the link (i.e. signal is reversed}	• Connect controller. • Install a phase reversing cable between the controller and the first fixture on the link

	Poor data quality	• Check data quality. If much lower thon 100 percent, the problem may be a bad data link connection, poor quality or broken cables, missing termination plug, or a defective fixture disturbinq the link
	Bad data link connection	• Inspect connections and cables . Correct poor connections. Repair or replace damaged cables
Fixtures reset correctly, but some respond erratically or not at all to the controller	Data link not terminated with 120 Ohm termination plug	• Insert termination plug in output iack of the last fixture on the link
	Incorrect addressing of the fixtures One of the fixtures is defective and disturbs data transmission on the link 3-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed)	• Check address setting • Bypass one fixture at a time until normal operation is restored: unplug both connectors and connect them directly together. • Have the defective fixture • serviced by a qualified technician • Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture that behaves erratically
No light or LEDs cuts out intermittently	Fixture is too hot	• Allow the fixture to cool down • Clean the fan • Make sure air vents in control panel and the front lens are not blocked • Turn up the air conditioninq
	LEDs damaged	• Disconnect the fixture and return it to your dealer
	The power supply settings do not match local AC voltage and freauencv	• Disconnect fixture. Check settings and correct if necessary

12. Product Specifications

Model:	TBox G2
Power supply	9V DC, 500mA power adapter
Power consumption	5W
Dimensions	170 x 105 x 50 mm
Weight	0,28 kg

Details	
Onboard	LCD display
Contrai protocols	DMX-512, RDM, MIDI
Connections	5-pin XLR IN&OUT, MIDI, Micro SD slot
Housing	PVC

Max. ambient temoerature ta	35°c
Max. housino temperature ts	70°c

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

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