

# MANUAL UGLYBOX MKII



# CONTENTS

1.	Operation of UglyBox MKII.....	3
2.	Menu A - "Main Menu".....	4
3.	Linking/Unlinking Operation.....	5
3.1	Linking Receivers.....	5
3.2	Unlinking Receivers.....	6
4.	Menu B - "Link Quality".....	6
5.	Menu C - "Histogram".....	7
6.	Menu D - "Log".....	7
7.	Menu E - "WDMX".....	8
8.	Menu F - "DMX Out".....	8
9.	Menu F2: "DMX Out Timing".....	9
10.	Menu G - "DMX In".....	9
11.	Menu G2: "DMX In Timing".....	10
12.	Menu H - "RGB Fixture".....	10
13.	Menu I 1: Settings   Timing "Time".....	11
14.	Menu I 2:.....	11
15.	Menu I 3: Settings   Power "Power".....	12
16.	Technical Data.....	13

## W-DMX UglyBox MKII User Manual

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Subject to modifications.

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# 1. OPERATION OF UGLYBOX MKII:

To power up the UglyBox, press the button for 3s and the display will turn on. When the unit is powered on, the button will always get you to the main screen.

## Use UglyBox as Transmitter:

- Select the WDMX menu and setup the UglyBox as transmitter
- Select the output radio mode and output power

In the main menu, link or unlink your receivers, you have also access to a simple faders to set the DMX level in the DMX out screen.

## Use UglyBox as Receiver:

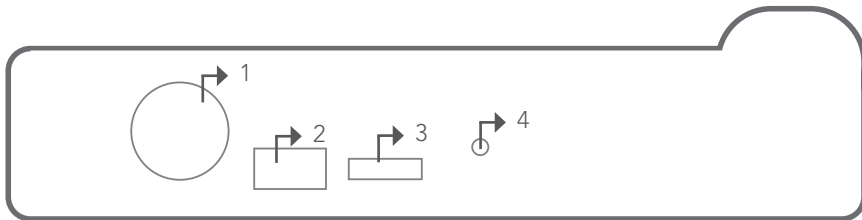
- Select the WDMX menu and setup the UglyBox as receiver

Link the UglyBox from the desired transmitter as you do with any W-DMX Receiver.

## There are 4 ways to track the radio reception:

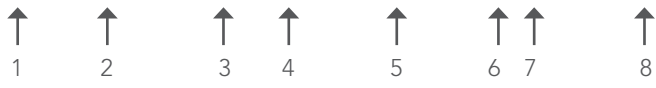
- In all menus, the momentary reception is displayed in the title bar
- Link Quality, shows the momentary reception
- Histogram, shows the reception over a selected period of time
- Log, if you have an SD card, you can setup the UglyBox to Log the reception level, either automatically on a periodically basis or manually. When you log the reception level automatically, you can insert extra points in the log file by pressing "Add Point", that is the operation when you have the manual log as well

The UglyBox has also the possibility to show the DMX levels or function as an RGB fixture.



- 1: Antenna
- 2: Power
- 3: SD card
- 4: Button

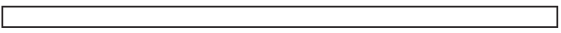
## 2. MENU A - "MAIN MENU"



- 1: Display current time, can be set in Settings | Time
- 2: Title of current menu screen
- 3: Indicate if the automatic log function is active (indicated with green background)
- 4: Indicate mode and reception level (if rx)
- 5: Indicate reception level (if rx)
- 6: Indicate status of SD card: White; working SD card, Red flashing; SD card not present, Yellow (flashing); SD card present but not working
- 7: Indication of OEM LED from radiocard (see OEM LED description below)
- 8: Indication of battery level

### OEM LED DESCRIPTION

#### LED Indication - Receiver:



Continuously Off = not assigned to a transmitter



On 900ms / Off 100ms = assigned to a transmitter, but no DMX present



Continuously On = assigned to a transmitter and DMX present



On 100ms / Off 100ms = link to transmitter lost or linking to transmitter

#### LED Indication - Transmitter:



On 900ms / Off 100ms = no DMX present



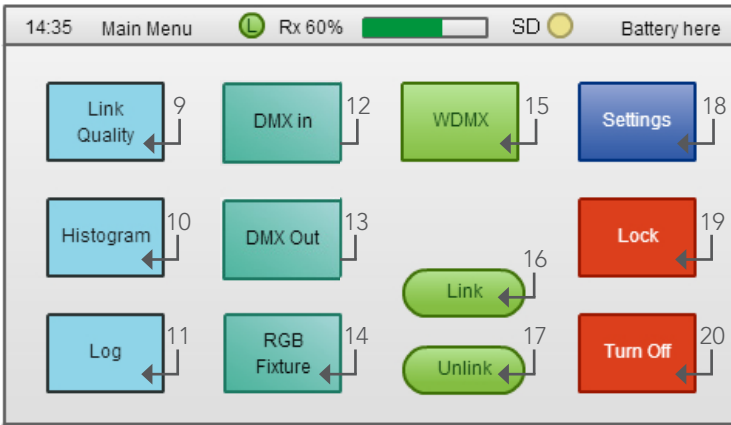
Continuously On = DMX present



On 100ms / Off 100ms = linking receivers



On 500ms / Off 500ms = unlinking all receivers

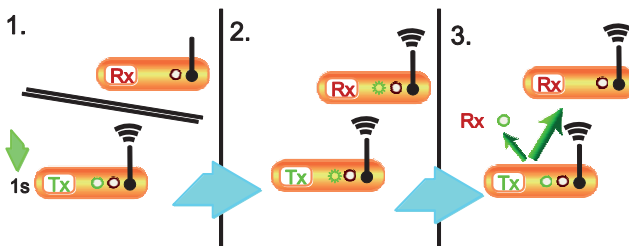


- 9: Open Link quality screen (Active when UglyBox is receiver). (See "Menu B")
- 10: Open link histogram screen (Active when UglyBox is receiver) (See "Menu C")
- 11: Open Log configuration screen (Active when UglyBox is receiver) (See "Menu D")
- 12: Open DMX input screen (Active when UglyBox is transmitter) (See "Menu G")
- 13: Open DMX output screen (Active when UglyBox is receiver) (See "Menu F")
- 14: Open RGB fixture screen (Active when UglyBox is receiver) (See "Menu H")
- 15: Open W-DMX Settings screen (See "Menu E")
- 16: Link receiver to this transmitter (Active when UglyBox is transmitter)
- 17: Unlink all linked receivers (Active when UglyBox is transmitter) or unlink this receiver (Active when UglyBox is receiver)
- 18: Open settings menu (See "Menu I")
- 19: Activate lock function, need a pin code to unlock the unit. The pincode is displayed and set in the Settings | Power | pin code screen. Default pincode is 1234
- 20: Turn off the unit

### 3. LINKING/UNLINKING OPERATION

#### 3.1 LINKING RECEIVERS

When the UglyBox is operating as transmitter, you need to link the receivers to be able to investigate the link conditions.



**Verify that the receivers are unlinked:**

On UglyBox, the unit is unlinked if the yellow “OEM LED Indicator” is off (see Menu A).

If the “OEM LED Indicator” is flashing, the unit is linked and you need to unlink it by pressing “UNLINK” button on the main menu (see Menu A, item 17).

On W-DMX RX units, if the LINK led is not off, the unit is linked, press and hold the red function switch for 5s until the LINK led turn off.

For fixtures with build in W-DMX cards, refer to the manufacturers manual to determine the link state and to unlink the unit.

On the transmitting UglyBox, press the Link button on the Main Menu (see Menu A, item 16).

The OEM LED indicator will start to flash rapidly to illustrate that link packages are transmitted, all unlinked receivers that is within range will get the link information and store that in non-volatile memory, after a few seconds, the transmitter will go back to normal operation, and you are ready to test your setup.

**3.2 UNLINKING RECEIVERS**

**As transmitter:**

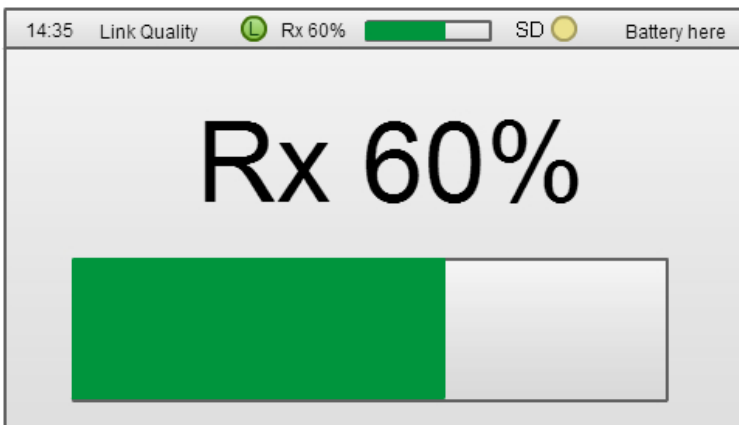
The UglyBox are able to send unlink command to all receivers that is currently linked to the transmitting ugly box, to do this, press “Unlink” button on the Main Menu (see Menu A, item 17). This will be indicated on the “OEM LED Indicator” with a slow flashing for a few seconds, the unit will then go back to normal operation.

**As receiver:**

The UglyBox are able to unlink itself, to be ready to be linked to other transmitters. Press the “Unlink” button on the Main Menu (see Menu A, item 17). The unit will be unlinked and this is indicated on the “OEM LED Indicator” by turning it off.

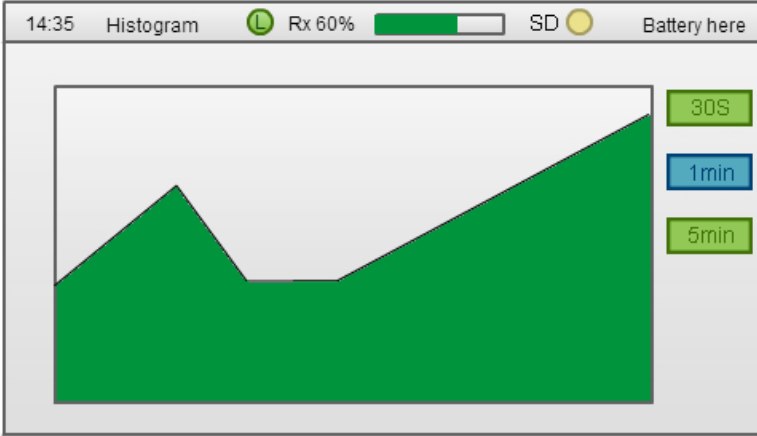
**4. MENU B “LINK QUALITY”**

Shows reception level in % and as a graphical bar, same information as the top status bar always visible.



## 5. MENU C “HISTOGRAM”

Shows reception level in % over time, time can be set to 30s, 1 minute or 30 minutes time.

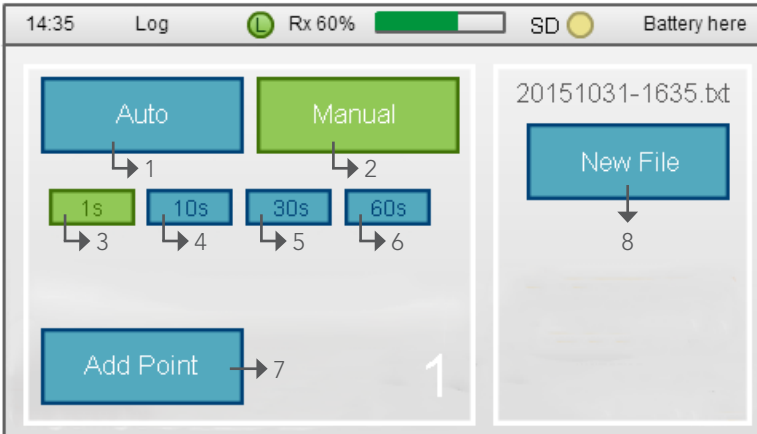


## 6. MENU D “LOG”

Configuration for log file. The log file is a text file that contains the following information:

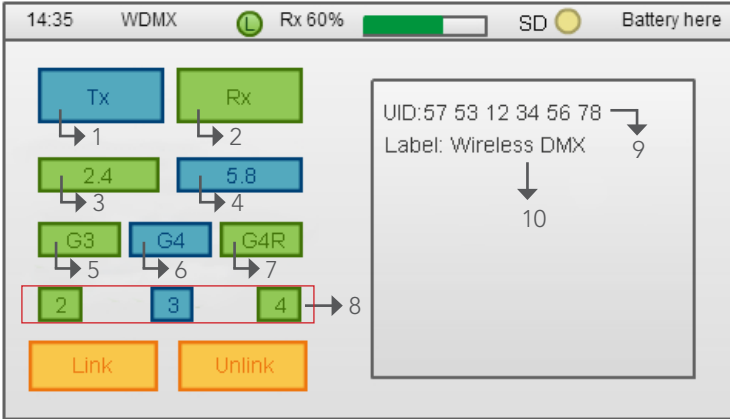
{Point number},{Date},{clock},{Link info },{reception}

Where {Point number}:	4 digits
{Date}:	YYYY-MM-DD
{Time}:	HH:MM:SS
{Link info}	1 if there is a link, 0 if there is no link
{reception}	In percent, 3 digits



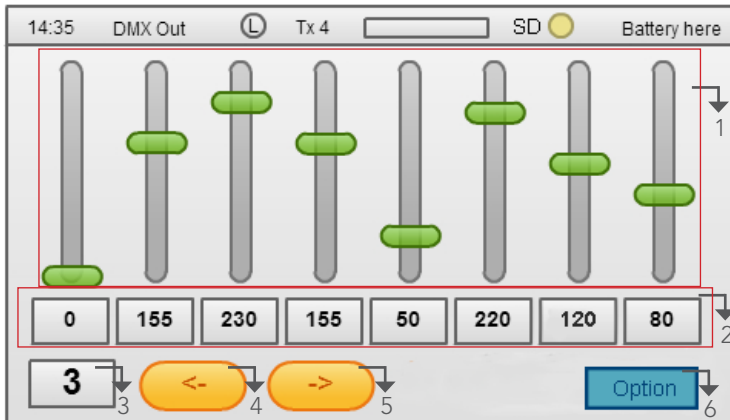
- 1: Select automatic logging, one point is added each time interval
- 2: Manual logging, points are added to the file when “Add Point” is pushed
- 3-6: Set log interval
- 7: Add an extra point in the log, if automatic, that will be added between the automatic points
- 8: Create a new file, the file name has the format YYYYMMDD-HHMM.txt at the time of creation

## 7. MENU E: “WDMX”



- 1: Set the radiocard in TX mode (radiocard restarts and screen is reloaded)
- 2: Set the radiocard in RX mode (radiocard restarts and screen is reloaded)
- 3: Select 2.4 GHz band as TX
- 4: Select 5.8 GHz band (if available) as TX
- 5-7: Select radio mode as TX
- 8: Select output power as TX
- 9: Radio card RDMUID
- 10: Radio card label

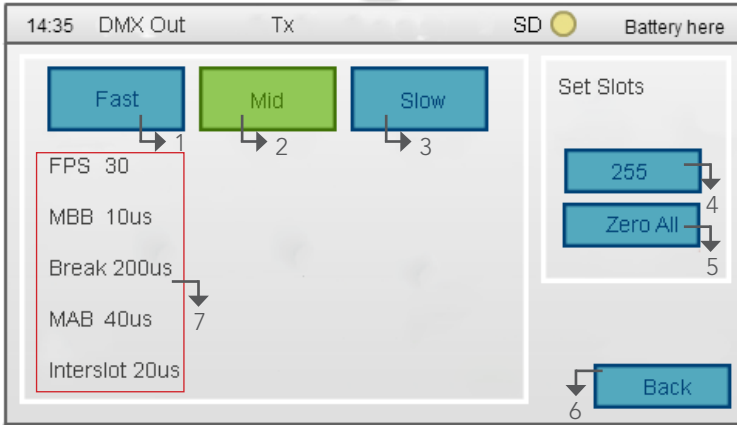
## 8. MENU F: “DMX OUT”



- 1: Faders for simple DMX controller
- 2: Numbers to indicate or set DMX level
- 3: Start address, press to enter a number
- 4: Decrease start address
- 5: Increase start address
- 6: Enter option menu for timing and to set all DMX channels (See “Menu F2”)

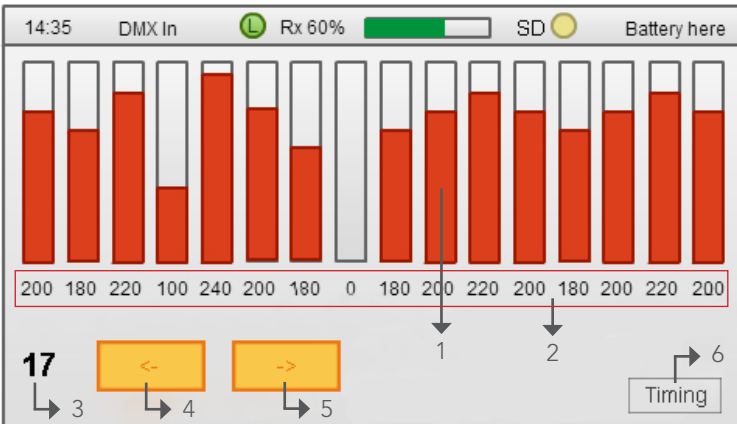


## 9. MENU F2: "DMX OUT TIMING"



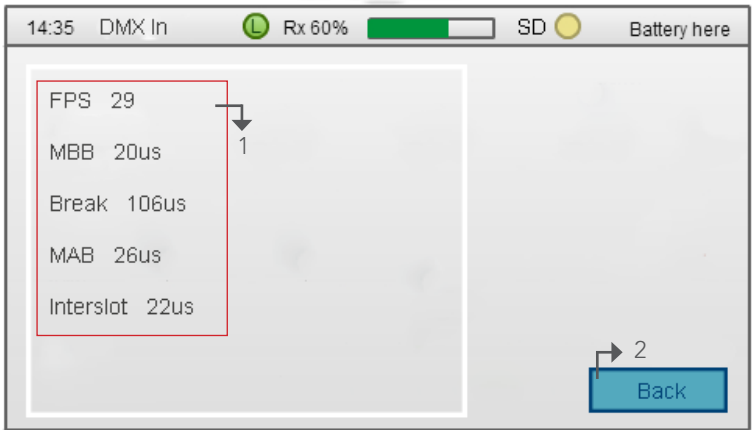
- 1: Select fast DMX output
- 2: Select mid DMX output
- 3: Select slow DMX output
- 4: Select all slots to a specific value, a keypad is displayed to set the DMX value
- 5: Set all slots to 0
- 6: Return to DMX Out screen
- 7: Displays the timing values used for the selected timing setting

## 10. MENU G: "DMX IN"



- 1: Graphical representation of DMX value
- 2: Decimal representation of DMX value (0 – 255)
- 3: Start address of view, press to set
- 4: Decrease start address
- 5: Increase start address
- 6: View timing information

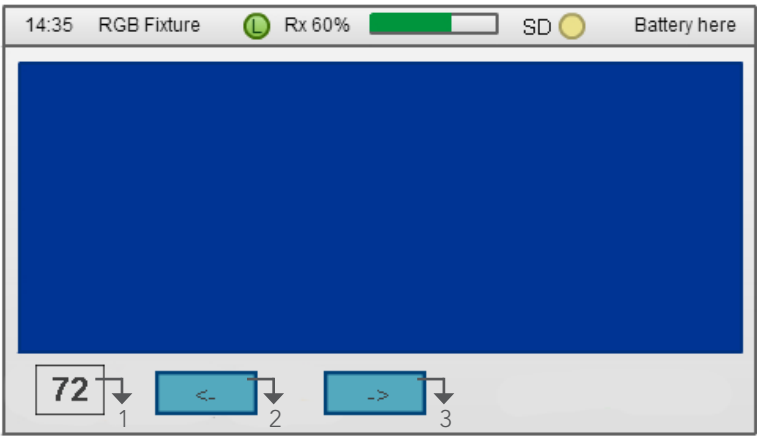
## 11. MENU G2: "DMX IN TIMING"



- 1: Displays the timing values read on the output
- 2: Return to DMX In screen

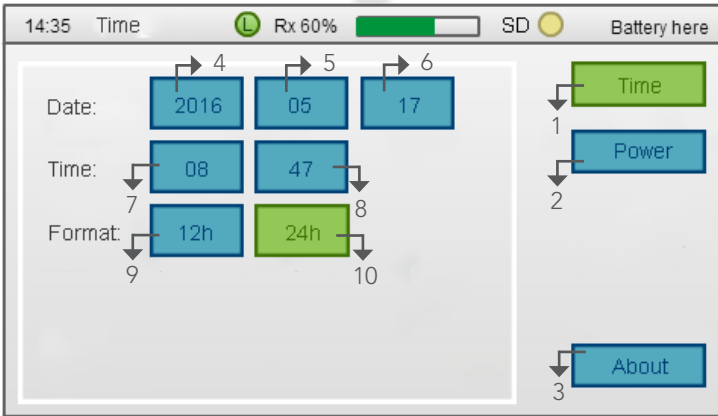
## 12. MENU H: "RBG FIXTURE"

The display acts as an RGB fixture



- 1: Start address, press to change
- 2: Decrease start address
- 3: Increase start address

## 13. MENU 1: SETTINGS | TIMING “TIME”

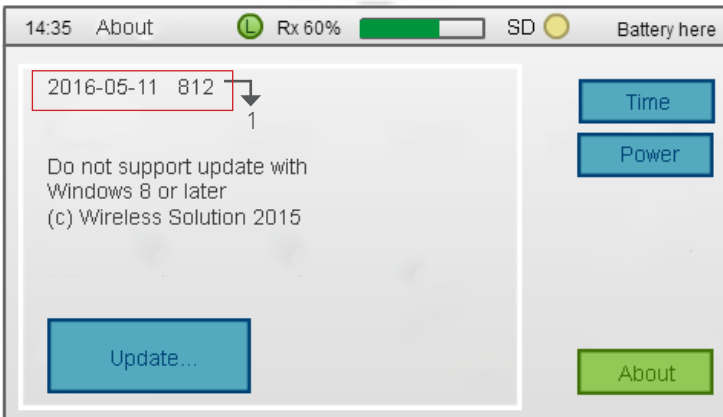


- 1: View the Time settings
- 2: View the power settings (for Ugly Box, not for radiocard)
- 3: About window
- 4: Press to change year, a keypad is displayed to set the year value
- 5: Press to change month, a keypad is displayed to set the month value
- 6: Press to change date, a keypad is displayed to set the date value
- 7: Press to change hour, a keypad is displayed to set the hour value
- 8: Press to change minute, a keypad is displayed to set the minute value
- 9: Press to change to 12h format
- 10: Press to change to 24h format

## 14. MENU 12:

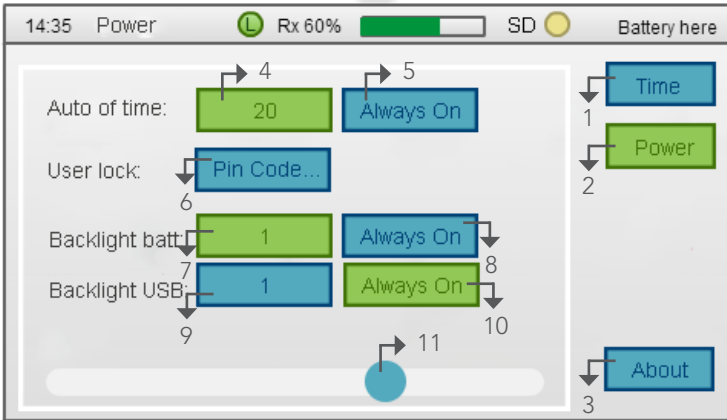
Display basic information about software version.

If connected to a PC, select “Update” to upload new firmware file from a PC computer, not running Windows 8 or later.



1. Software date and revision

## 15. MENU | 3: SETTINGS | POWER “POWER”



- 1: View the Time settings
- 2: View the power settings (for Ugly Box, not for radiocard)
- 3: About window
- 4: Press to select automatic turn off time, you get a keypad to set the time in minutes
- 5: Press to always have the unit on
- 6: Press to view and change the pin code used for Locking, a keypad is displayed
- 7: Set the timeout for backlight when running from battery, a keypad is displayed to set the time in minutes
- 8: Turn off the timeout for backlight when running from battery
- 9: Set the timeout for backlight when running from USB power, a keypad is displayed to set the time in minutes
- 10: Turn off the timeout for backlight when running from USB power
- 11: Select the backlight intensity

## 16. TECHNICAL DATA

<b>Electrical data</b>	
<b>Regulation complied with</b>	Certified Worldwide (FCC, ETL, ETSI, CE, Japan, Russia)
<b>High voltage input</b>	Uac = 90 – 250V (external power supply)
<b>Low voltage input</b>	Udc = +5V
<b>DC power supply</b>	micro USB
<b>Dimensions, width x height x depth</b>	180 x 100 x 45mm
<b>Weight</b>	800 g
<b>Environmental conditions</b>	IP41
<b>Ambient temperature range</b>	0 deg C to 50 deg C
<b>Humidity</b>	90%
<b>Input protocols</b>	N/A
<b>DMX512</b>	Yes
<b>RDM</b>	No (radio card support, but no UglyBox support)
<b>Ethernet No</b>	N/A
<b>Loss of data behavior</b>	As wire
<b>Output protocols</b>	N/A
<b>DMX512</b>	Yes
<b>RDM</b>	No
<b>Ethernet</b>	No
<b>Radio technologies</b>	W-DMX
<b>2.4 GHz</b>	Yes
<b>5.8 GHz</b>	No
<b>Adaptive Frequency Hopping</b>	Yes
<b>W-DMX G3 compatibility</b>	Yes
<b>License free</b>	Yes
<b>W-DMX Datasafe Redundancy</b>	Yes

# ARE YOU WIRELESS?

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