ROBE.

ROBIN iParfect 150 FW RGBA
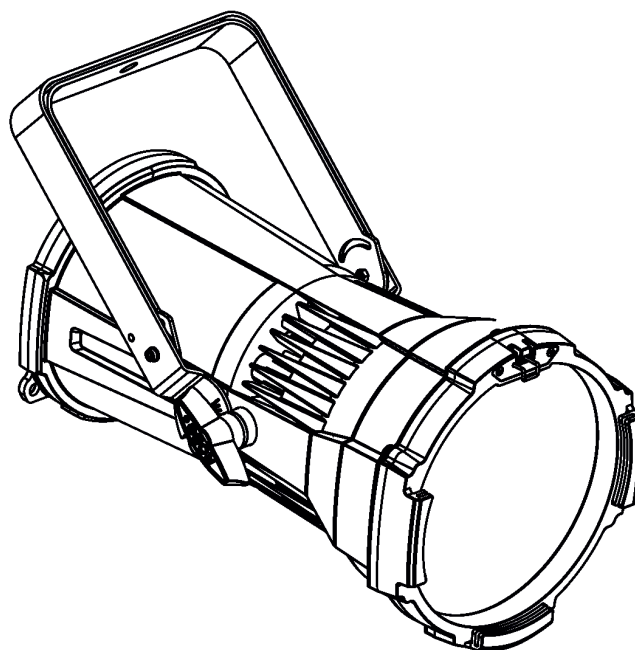## ROBIN iParfect 150 FW RGBA
Wireless DMX

ROBIN iParfect 150 FWQ RGBA
ROBIN iParfect 150 FWQ RGBA
Wireless DMX

QR code for user manual

USER MANUAL

ROBE® lighting s.r.o. • Czech Republic • www.robe.cz

Version 1.8

ROBIN iParfect 150 FW RGBA
ROBIN iParfect 150 FWQ RGBA

Table of contents

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

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.

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

The iParfect 150 was designed for outdoor use and it is intended for professional application only. It is not for household use.

1. Safety instructions

DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT!

Make sure that the available voltage is not higher than stated on the rear panel of the fixture.
This fixture should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized distributor or local power company.

Always disconnect the fixture from AC power before cleaning, removing or installing any part of the fixture.

The power plug has to be accessible after installing the fixture. Do not overload wall outlets and extension cords as this can result in fire or electric shock.

Do not allow anything to rest on the power cord. Do not locate this fixture where the cord may be damaged by persons walking on it.

Make sure that the power cord is never crimped or damaged by sharp edges. Check the fixture and the power cord from time to time.

Refer servicing to qualified service personnel.

This fixture falls under protection class I. Therefore this fixture has to be connected to a mains socket outlet with a protective earthing connection.

Do not connect this fixture to a dimmer pack.

Warning!
Risk group 1, RG-1 (for beam angle >10°)
Risk group 2, RG-2 (for beam angle =<10°).
Do not stare at exposed lamp in operation. May be harmful to the eyes.
Avoid looking directly into the light source
LED light emission. Do not view the light output with optical instruments or any device that may conncentrate the beam.
The light source contains blue LEDs.

Avoid brute force when installing or operating the fixture.

When choosing the installation spot, please make sure that the fixture is not exposed to extreme heat, or dust.

Do not block the front transparent glass with any object when the fixture is under operation.

Housing of the fixture should never be covered with cloth or other materials.

This fixture should not be placed in a built-in installation unless proper ventilation is provided.

Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

To avoid damage of an internal optical system of the fixture, never let the sunlight (or other light source) lights directly to the lens array, even when the fixture is not working

The fixture becomes very hot during operation. Allow the fixture to cool approximately 30 minutes prior to servicing or maintenance.

Operate the fixture only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the fixture. Most damages are the result of unprofessional operation!

Please use the original packaging if the fixture is to be transported.

Please consider that unauthorized modifications on the fixture are forbidden due to safety reasons!

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void.

2. Fixture exterior view
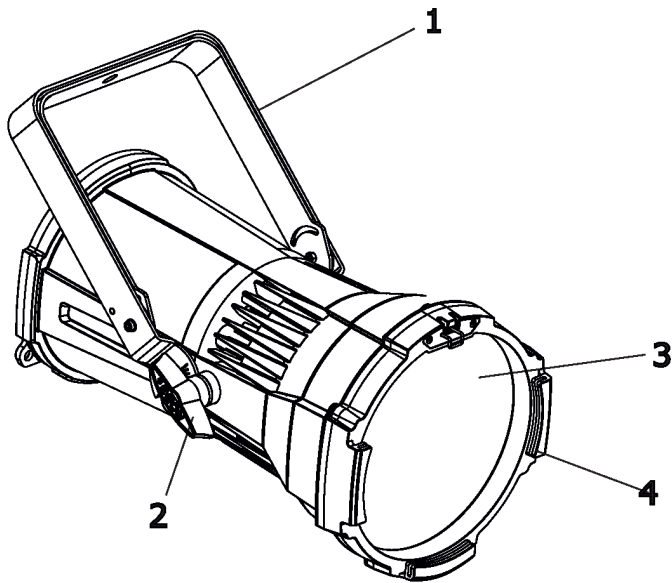
1 - Mounting bracket
2 - Tilt locks
3 - Lens array with transparent
    glass cover
4 - Accessory frame adaptor
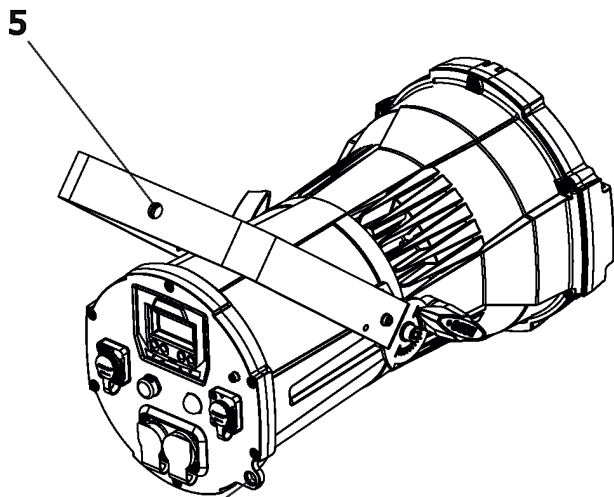
5 - Mounting hole for clamp
6 - Attachment point for accessories
7 - DMX OUT (with sealing cover)*
8 - Mains IN (with sealing cover)*
9 - Mains OUT (with sealing cover)*
10 - DMX IN (with sealing cover)*
11 - Display and control buttons
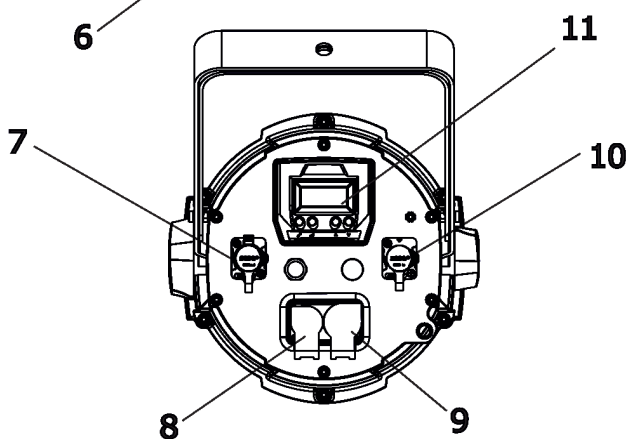
*IMPORTANT!
Fixture´s power connectors (8, 9) are dust and water protected according to protection class IP 65 by mating with related power connectors with cords (IP 65 rated) or by covering with the rubber sealing covers . They cannot stay uncovered outdoor (e.g. during fixture installation).

Fixture´s DMX connectors (7, 10) are dust and water protected according to protection class IP 65 by mating with related power connectors with cords (IP 65 rated) or by covering with the rubber sealing covers . They cannot stay uncovered outdoor (e.g. during fixture installation).

3. Installation

 Fixtures must be installed by a Qualified electrician in accordance with all national and local electrical and construction codes and regulation.

3.1 Connection to the mains

For protection from electric shock, the fixture must be earthed!

The iParfect 150 is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts.

Install a cord cap on the power cable to allow connection to power outlet, install a grounding-type (earthed) plug with suitable IP rating , following the plug manufacturer's instructions.
If you have any doubts about proper installation, consult a qualified electrician.

Core (EU)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⏚

This device falls under class one and must be earthed (grounded)!

The max. number of connected fixtures in power chain depends on AC mains power voltage:

CE:
 15 fixtures at power supply= 230V
 13 fixtures at power supply= 208V
 7 fixtures at power supply= 120V

ETL:
9 fixtures at power supply= 230V
8 fixtures at power supply= 208V
4 fixtures at power supply= 120V

Actual number of fixtures may differ from values stated above as you have to take into account the length of supply cables, circuit breaker etc. at projecting of the fixtures installation Do not overload the supply line and connecting leads.
Wiring and connection work must be carried out by qualified staff!

.

Supply lead

6
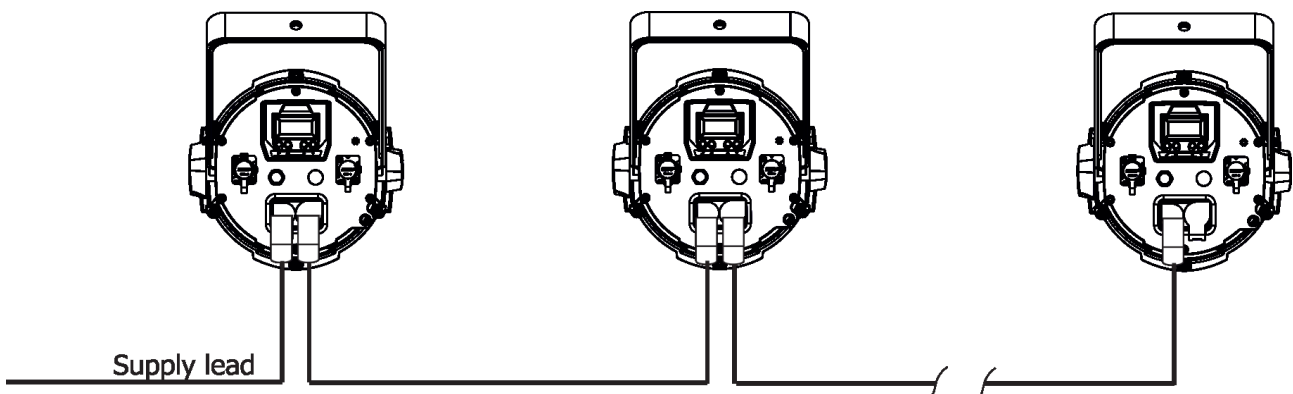
3.2 Installing barndoors and the gel frame

Disconnect the fixture from mains before barndoors and the gel frame installation!

1. Unlock the spring lock (1) of the accessory frame adaptor (2) via pushing this spring lock as show red arrows on the picture.
2. Insert the gel frame (3) into the bottom slots of the accessory frame adaptor (2).
3. Insert the barndoors (4) into the top slots of the frame adaptor (2).
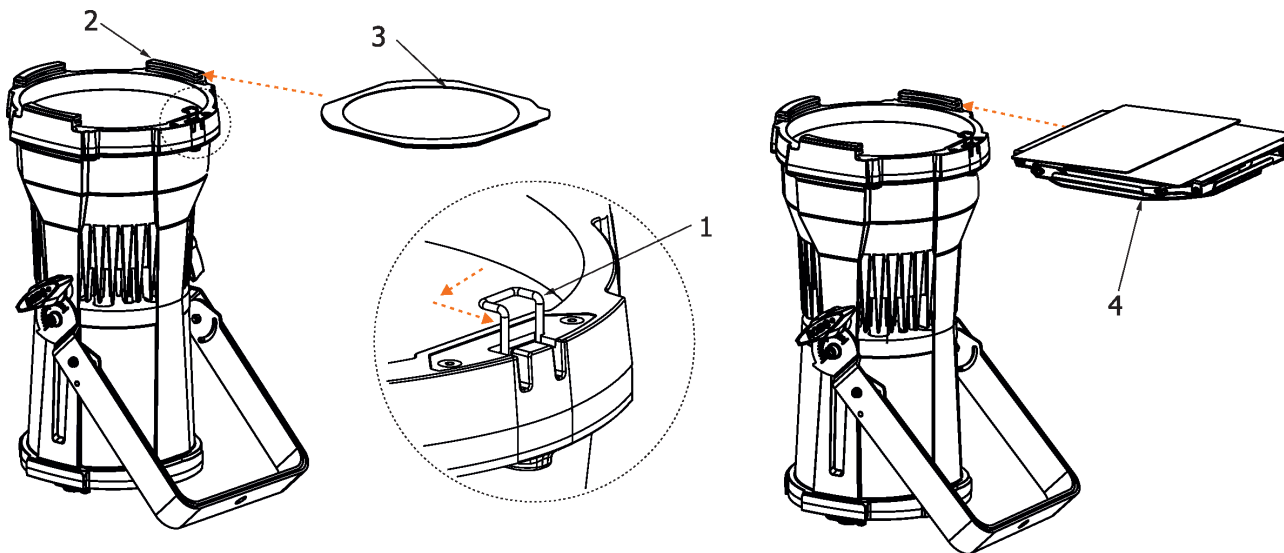
4. Secure both accessories by moving the spring lock (1) to locked position as shows the red arrow on the picture.
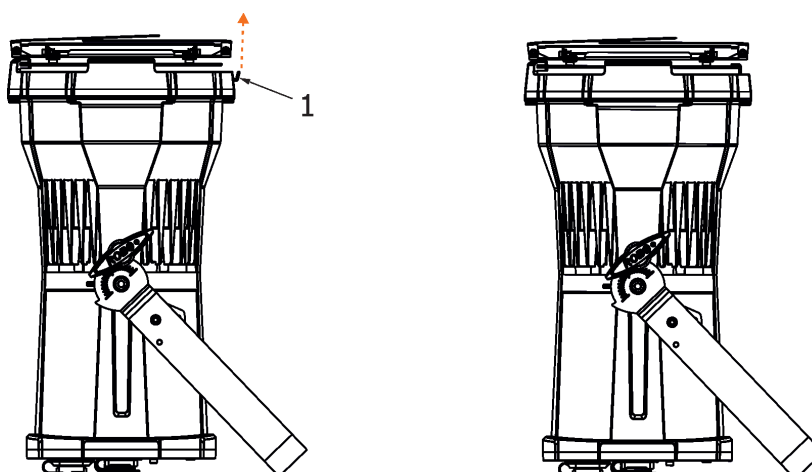
Note: the barndoors can be rotated to desired position and secured in this position via the securing screw (5).

5
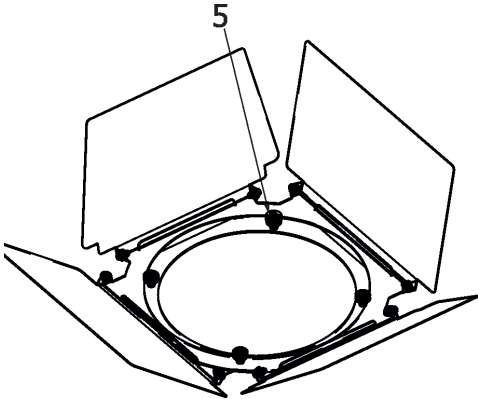
3.4 Rigging the fixture

A structure intended for installation of the fixture(s) must safely hold weight of the fixture(s) placed on it. The structure has to be certificated to the purpose.

The fixture must be installed in accordance with national and local electrical and construction codes and regulation.

> *For overhead installation, the fixture must be always secured with a safety wire.*

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but use a help of professional companies.

CAUTION: Fixtures may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the fixture!

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

Allow the fixture to cool for ten minutes before handling with it.

The fixture has to be installed out of the reach of public.

The fixture must never be fixed swinging freely in the room.

> **When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 0.4 m.**

> **Use an appropriate clamp to rig the fixture on the truss.**
> **Make sure that the device is fixed properly! Ensure the structure (truss) to which you are attaching the fixtures is secure.**
> **When installing fixtures side-by-side, avoid illuminating one fixture with another!**

The fixture can stand on the stage floor (by means of the unfolded mounting bracket) or rigged on a truss (via folded mounting bracket) without altering its operation characteristics.
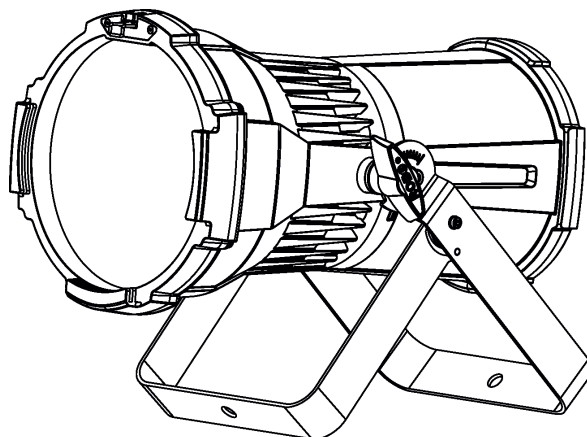
For securing the fixture to the truss, install a safety wire which can hold at least 10 times the weight of the fixture. Use only the safety wire with snap hooks with screw lock gates. Fasten the safety cable around the truss and the mounting bracket as shown on the picture below.
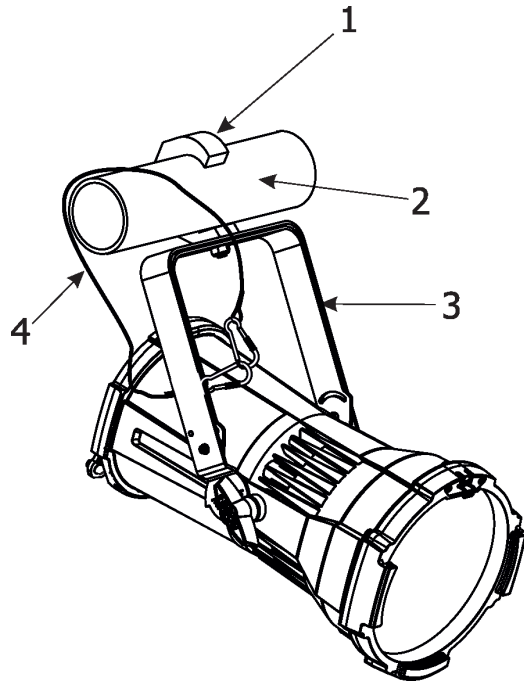
1-Clamp
2-Truss
3-Mounting bracket
4-Safety wire

3.5 DMX-512 connection

The fixture is equipped with 5-pin XLR sockets for DMX input and output. Only use a shielded twisted-pair cable designed for RS-485 and 5-pin XLR connectors in order to connect the controller with the fixture and fixtures each other.
To keep declared IP rating of the fixture, all used XLR connectors and cables have to meet IP 65 rating.

DMX output
XLR socket:

1 - Shield
2 - Signal (-)
3 - Signal (+)
4 - Not used
5 - Not used

DMX input
XLRplug:

1 - Shield
2 - Signal (-)
3 - Signal (+)
4 - Not used
5 - Not used

If you use a standard DMX controllers, you can connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX chain. If you wish to connect DMX controller with other XLR outputs, you need to use adaptor cables.

Building a serial DMX-chain:
Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture. Always connect fixture DMX output with the DMX input of the next fixture until all fixtures are connected. Up to 32 fixtures can be interconnected.
Caution: At the last fixture, the DMX chain has to be terminated with a terminator. Solder a 120 Ω resistor between Signal (−) and Signal (+) into a 5-pin XLR-plug and plug it in the DMX output of the last fixture.
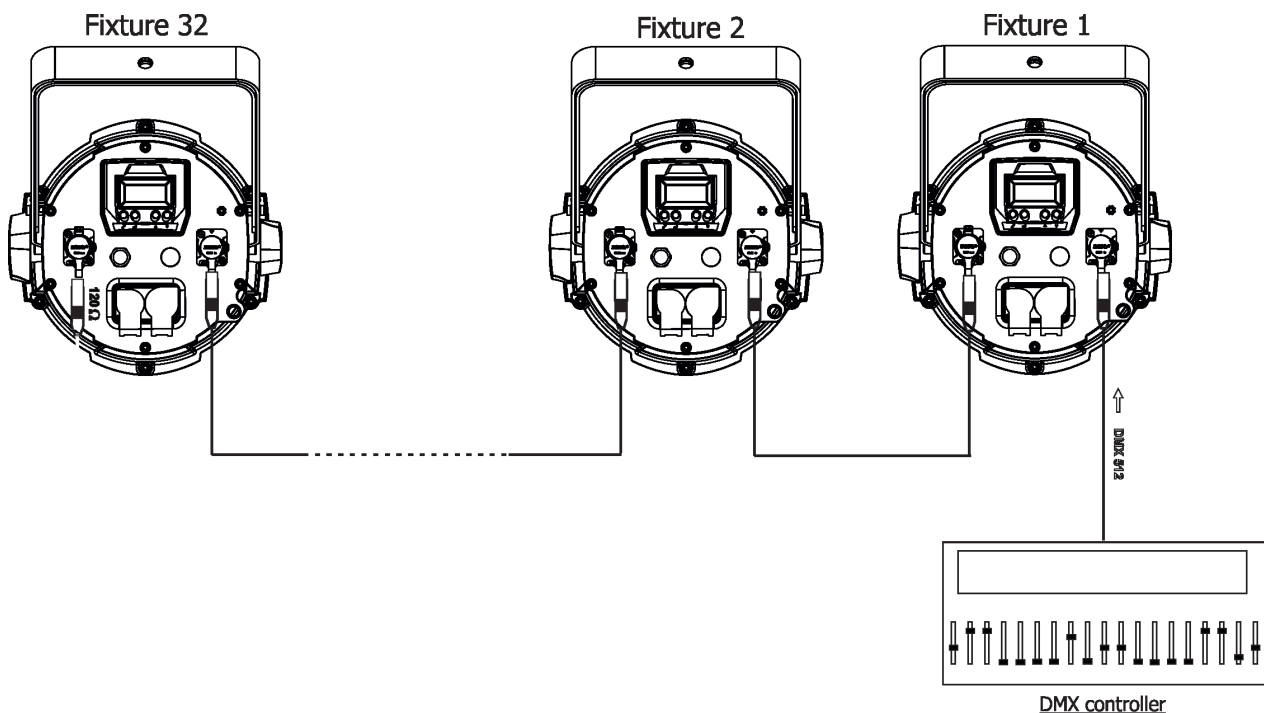
3.6. Wireless DMX operation

The wireless DMX version of the fixture is equipped with the Lumen Radio CRMX module and antenna for receiving DMX signal. CRMX module operates on the 2.4 GHz band.

To link the fixture with DMX transmitter.
The fixture can be only linked with the transmitter by running a link procedure on DMX transmitter .
After linking , the level of DMX signal (0-100 %) is displayed in the menu item "Stat" (Special -->Vireless -->Stat).

To unlink the fixture from DMX transmitter.
The fixture can be unlinked from receiver via the menu item " Unlink" (Special-->Vireless -->Unlink.).

4. Control menu map

Default settings=Bold print

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
DMXA	Set DMXA	001-512				
	DMX Pres	**Mode 1**				
		Mode 2				
		Mode 3				
Info	POn Time	Total				
		Reset				
	DMX In	Powr	0-255			
		:				
		Dim F	0-255			
	Hea Temp	Current				
		Highest				
		High Res				
	Sw Ver	IC-1				
		IC-2				
Pers						
	DMX Pres	**Mode 1**				
		Mode 2				
		Mode 3				
	DMX In	**Wired**				
		Wireless				
	Display	Turn				
		On/Off T	**On,** Off			
		Contrast	0-100%			
		Backlight	0-100%			
	Col Mix	**RGBA**, CMY				
	White P	**On**, Off				
	Dimmer C	**Square**, Linear				
	LED Freq	Stand				
		High				
	LED Fadj	-06,-05..00..05, 06				
	Temp Uni	**°C**, °F				
	I Ef Pos	Powr				
		:				
		Dimm F				
		Store				
	Defaults					
Manual	Manual C	Powr	0-255			
		:				
		Dim F	0-255			
Test Prg						
Sta Alone						
	Auto Run	**Off**				
		Test				
		Prog 1				
		:				
		Prog 3				
	Pr Play	Test Prg				

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
		Prog 1				
		:				
		Prog 3				
	Pr Edit	Prog 1	Step 1	Powr		
		Prog 2	:	:		
		Prog 3	Step 40	F.Tim	0-25.5	
				S.Tim	0-25.5	
				COPY		
				Prg En	1-40	
Reset						
Special	RDM Low					
	RDM Hight					
	Wireless	Stat				
		Unlink				
	Adjust	DMX Val	Powr	0-255		
			:			
			Dim F	0-255		
		Clalib	Cal Mech	Zoom C	0-255	
				Store		
			Cal Col	Red C	0-255	
				Gre C	0-255	
				Blu C	0-255	
				Amb C	0-255	
				Store		
			Cal Load			
	Sw Upd	On, **Off**				

5. Control menu (Standard and Easy control mode)

The iParfect 150 is equipped with 2-row LCD display which allows to set the fixture´s behaviour according to your needs, obtain information on its operation, control all range of effects and program it in stand-alone mode.

The four control buttons have the following functions according to the control mode:

Standard control mode (default setting)
↗ - ESCAPE button used to leave the menu without saving changes.
▲ , ▼ - NEXT, PREV buttons for moving between menu items and for value adjusting.
↵ - ENTER button used to enter the selected menu (menu item) and to confirm adjusted value.
After switching the fixture on, the display shows set DMX address.

```
           DMXA
           001
```

```
ESCAPE  ENTER   NEXT  PREV
```
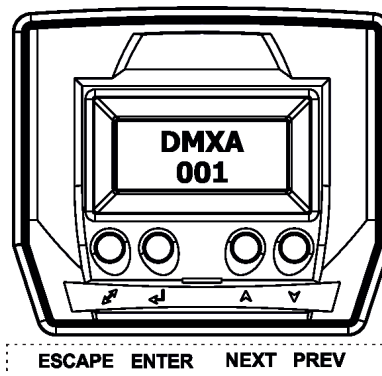
Easy control mode
[INTENSITY] buttons used to set light intensity (dimmer).
[COLOR] buttons used to set colour on the Virtual colour wheel.
After switching the fixture on, the display shows dimmer intensity and colour which have been set before switching the iParfect 150 off.

```
        INT  45%
        COL  009
```

```
  INTENSITY      COLOR
  ▲      ▼      ▲      ▼
```
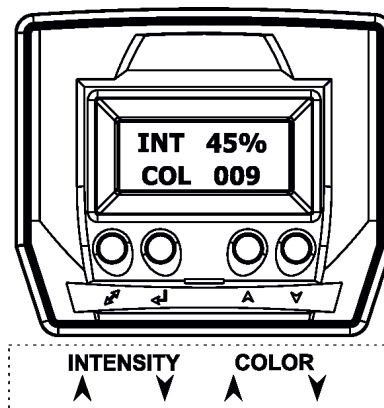
When the fixture is switched off, both adjusted color and light intensity are saved into memory and loaded after switching the fixture on.
Note: DMX control in this mode is disabled.

Switching the fixture to Easy control mode
When the current DMX address is displayed in the Standard control mode:

```
       DMXA

       0001
```
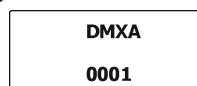
press the [NEXT] and [PREV] buttons at the same time until the screen for the Easy control mode appears.

```
      INT  45%

      COL  009
```
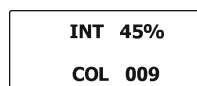
For switching the fixture back to the Standard control mode, press the [NEXT] and [PREV] buttons at the same time until the screen for the Standard control mode appears.

5.1 Addressing (DMXA)

Set DMXA - Use this menu item to set the DMX start address of the fixture, which is defined as the first channel from which the iParfect 150 will respond to the controller.
If you set, for example, the address 31, the iParfect 150 will use channels 31 - 48 for control (if Mode 1 is selected).
Please, be sure that you do not have any overlapping channels in order to control each iParfect 150 correctly and independently from any other fixture on the DMX data link.
If there is no data received at the DMX input, the display will start to flash "0001" with actually stored DMX address.

DMX Pres - **DMX preset**. Use the menu to select desired channel mode.
   Mode 1 - 17 control channels (default)
   Mode 2 - 11 control channels
   Mode 3 - 5 control channels

5.2 Fixture information (Info)

POn Time - **Power on time**. Select this menu to read the number of fixture operation hours.
        Total - The item shows the total number of the operation hours since
        the iParfect 150 has been fabricated.
        Reset - The item shows the number of the operation hours that the
        iParfect 150 has been powered on since the counter was last reset.
        In order to reset this counter to 0, press and hold both [NEXT] and [PREV] buttons and
        the [Enter] button at the same time.

DMX In - **DMX readout.** The menu is used to read DMX values of each channel received by the fixture.

Hea. Temp - **Temperature**. The menu shows temperature of the LED module.
        Current - A current temperature of the LED module.
        Highest - A maximum temperature of the the LED module since the fixture has
        been fabricated.
        High Res - A maximum temperature of the the LED module since the counter
        was last reset.
        In order to reset this counter, press and hold both [NEXT] and [PREV] buttons and the
        [Enter] button at the same time.

Sw Ver - **Software versions**. Select this item to read the software version of the fixture modules.
        IC-1 - A display processor.
        IC-2 - A LED control processor.

5.3 Personality (Pers)

DMX Pres - **DMX preset**. Use the menu to select desired channel mode.
   Mode 1 - 17 control channels (default)
   Mode 2 - 11 control channels
   Mode 3 - 5 control channels

DMX Input- Use the menu to select mode of DMX signal receiving.
   Wired - DMX signal is received by means of the standard DMX cable.
   Wireless - DMX signal is received by means of the inbuilt wireless module (wireles DMX version only).

Display - **Display adjusting**. This menu allows you to adjust the display behaviour.
        Turn - This function rotates menu 180 degrees from current orientation.
        Note: Pressing and holding the Escape button also rotates menu.
        On/Off T - This function allows you to keep the display permanent on or turn it off two
        minutes after last pressing any button on the control panel.
        Contrast- Use this function to adjust contrast of the display (0-100%).
        Backlight- Use this function to adjust backlight of the display (0-100%).

Col. Mix. - **Colour mixing mode**. This item allows switching into RGBA or CMY mode. In the CMY mode, the amber(8bit) and amber (16) bit channels are not active.

White P - **White Point 8000K**. If the function is on, the CTC channel allows to set desired white in range of 8000K-2700K
(0 DMX=8000K,64 DMX=5600K, 128 DMX=4200K, 192 DMX=3200K, 255 DMX=2700K). Necessary condition is , that RGBA channels have to be full (255DMX) or set at the same DMX values, e.g. 150 DMX.
If this function is off, the range of whites is not uniform and may be different for each fixture.

Dimmer C - **Dimmer curve**. Use the menu to select desired dimmer curve.
   Linear - a linear curve.
   Square - a square law curve.

LED Freq - **LEDs frequency setup**. The function allows you to set the PWM (Pulse Width Modulation) output frequency of LEDs to Standard or High.
   Stand - a standard frequency (300Hz).
   High - a high frequency (600Hz)

LED Fadj - **LEDs frequency fine adjustment**. The function allows you to change the selected PWM output frequency of LEDs in 6 levels up and down around the selected frequency in the menu "LED Freq".
   -06...-01 - Frequence levels 1-6 under selected frequency.
   00 - Selected frequency (Standard or High)
   01...06 - Frequence levels 1-6 above selected frequency.

Temp Uni - **Temperature unit**. Use the menu item to change temperature unit from °C to °F.

I Ef Pos - **Init effect positions**. Use the menu to set all effects to the desired positions at which they will stay after switching the fixture on without DMX signal connected. The option is also avaible by DMX command (channel Power/Special functions , DMX range 130-139).

Defaults - The menu item allows to set all fixture parameters to the default (factory) values.

5.4 Manual Control (Manual)

Use the menu to control all fixture channels by means of the control panel.

5.5 Test program (Test Prg)

Use this menu to to run a special demo-test sequences without an external controller, which will show you some possibilities of using the iParfect 150.

5.6 Stand-alone (St Alone)

The iParfect 150 offers three user-editable programs (Prog 1-Prog 3), each up to 40 steps. T

Auto Run - **Presetting playback**. This function allows you to select the program which will be played in the stand-alone mode after switching the fixture on. Selected program will be played continuously in a loop.
            Off - The option disables „Auto Run" function.
            Test, Prog 1, Prog 2, Prog 3 - Selected program will start running after switching
            the fixture on.

Pr Play - **Playing program**. Select this menu to run a desired program in a loop (Test Prg, Prog 1 - Prog 3).
            Select the program you wish to run and press the [ENTER]. The selected program
            will start running. By Pressing the [ENTER] again, the program pauses running.

Pr Edit - **Editing program**. Select this menu to edit or create three editable programs (Prog 1-Prog 3). Each program step has a step time - during which effects last in the current step and a fade time- during which effects move to new positions.
To edit program.
1. Press [NEXT] or [PREV] to select the menu "Pr Edit" and press [ENTER].
2. Press [NEXT] or [PREV] to select the desired program and press [ENTER] button.

3. Press [NEXT] or [PREV] to select the desired program step and press [ENTER] button.

4. Press [NEXT] or [PREV] to select the desired item and press [ENTER] button. Now you can edit by [NEXT] or [PREV] buttons the DMX value (0-255) for selected item:

Prg En.	a total number of the program steps (value 1-40). This value you should be set before starting of programming (e.g. if you want to create program with the 10 steps, set Prg En=10).
Powr	power/special functions
Virt C	a virtual colour wheel
Red	a red LEDs saturation (coarse)
Red F	a red LEDs saturation (fine)
Green	a green LEDs saturation (coarse)
Green F	a green LEDs saturation (fine)
Blue	a blue LEDs saturation (coarse)
Blue F	a blue LEDs saturation (fine)
Amber	an amber LEDs saturation (coarse)
Amber F	an amber LEDs saturation (fine)
CTC	a colour temperature correction
C Mix C	a colour mix control
Zoom	a zoom movement (coarse)
Zoom F	a zoom movement (fine)
Stro	a strobe/shutter function
Dimm	a dimmer function coarse
Dim F	a dimmer function fine
F.Tim	a fade time (0-25.5 sec)
S.TiM	a step time (0-25.5 sec)
COPY	copying the current prog. step to the next prog. step

5. Press [ENTER] button to confirm adjusted value .

6. Press [ESCAPE] button, select next prog. step, press [ENTER] button and repeat steps 4 - 5).

5.7 Reset function (Reset)

The function resets a zoom movement. During the zoom reset is light ouput closed.

5.8 Special functions (Special)

RDM Low - This menu item shows the first part of the RDM identification code.

RDM High - This menu item shows the second part of the RDM identification code.

Wireless - **Wireless DMX information**. The menu allows to read some information about Wireless DMX operation
> **Stat** - **Wireless status**. Use the menu to read wireless DMX status.
> **Unlink** - use this item to unlink fixture from wireless DMX.

Adjust - **Adjustment**. The menu allows the fine adjustment of effects.
> **DMX Val**- **DMX values**. Use the menu to set DMX values of fixture´s channels.
> **Calib** - calibration of white colour.
>> **Cal Mech** - Use this menu to calibrate a zoom position.
>> **Cal Col** - Use this menu to set white colour 5600K.

Calibration of the zoom position via the control board

1. Disconnect DMX controller from the fixture and enter the "Cal Mech" menu.

2. Use the [PREV] and [NEXT] to find "Zoom C" and press [ENTER].

3. Set desired value and confirm it by pressing [ENTER]..

4. After calibration, find item "Store" and press [ENTER]. to save all adjusted values and reset the fixture.

Calibration of the white 5600K via the control board

1. Disconnect DMX controller from the fixture , set the shutter, dimmer and RGBW channels at 255 DMX, zoom at 128 DMX and the CTC channel at DMX=64 (white 5600K). Aim the light beam on the lux meter (e.g. Minolta CL-500 A Chroma meter) which is placed roughly 5m from the fixture.

2. Set the menu items colour mixing mode "Colour Mix" to RGBA and white point 8000K "White P" to On

(Pers-> Col Mix -> RGBA, Pers-> White P -> On).
3. Enter the menu "Cal Col".
4. By means of the items "Red C, Gre C, Blu C and Amb C" adjust the 5600K colour temperature
   as exactly as possible ($\Delta u´v´= 0$).
5. After adjusting 5600K colour temperature, select item Store and press the [ENTER] button to save all
   adjusted values.

Note: you can also use DMX controler for both calibrations stated above, calibration protocol is the following:

Effect	*Mode 1*	*Mode 2*	*Mode 3*
Fine adjustment of zoom position	channel 18	channel 12	channel 9
Fine adjustment of red LEDs saturation	channel 19	channel 13	channel 10
Fine adjustment of green LEDs saturation	channel 20	channel 14	channel 11
Fine adjustment of blue LEDs saturation	channel 21	channel 15	channel 12
Fine adjustment of amber LEDs saturation	channel 22	channel 16	channel 13

      Cal Load - Loads default (factory) calibration.

Sw Upd - **Software update**. The menu item allows you to update software in the fixture.
The following items are required in order to update software:
- PC running Windows or Linux or macOS
- DSU file
- Flash cable RS232/DMX, P/N13050624 (if you want to use a serial port of PC)
- Robe Universal Interface or Robe Universal interface WTX (if you want to use an USB port of PC)

After the software updating the fixture will be set to default (factory) values.

To update software in the fixture:
1. DSU file is available from Robe web site at WWW.robe.cz.
   File with extension zip is intended for Windows (used and tested from XP to W10 on 32/64bit systems).
   File with extension tbz is intended for Linux (used and tested on Debian and Ubuntu 32/64bit).
   File with extension dmg is intended for macOS (used and tested on OSX up to Sierra) XQuartz required,
   install it from https://www.xquartz.org/
   Save the download file to a folder on your computer.
   In case that you use windows, extract files in the zip file (e.g. DSU_iParfect150FW_18032267.zip)
2. Disconnect the fixture from DMX controller.
3. If you use the flash cable RS232/DMX, connect a serial port of your computer with DMX input of the fixture
    by means of the cable.
   If you use the Robe Universal Interface, connect a USB port of your computer with the Robe Universal Interface
   by means of the USB cable and DMX input of the fixture with the DMX output of the Robe Universal Interface
   via a DMX cable.
4. Switch the fixture to the update mode (Special --> SW Upd).
   Note: If you do not want to continue in the software update, you have to switch off and on the fixture
   to escape from the updating mode.
   We recommend to cancel all running programs on your computer before starting the software update.
5. Double-click the software uploader file (e.g. DSU_iParfect150FW_18032267.exe) in
   the extracted files. The Software Uploader program will start running.
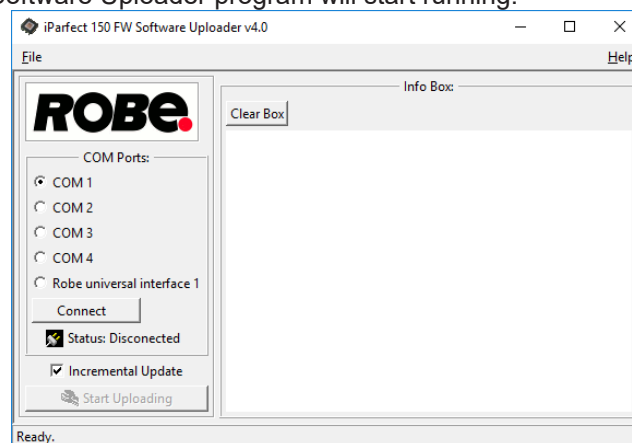
6. Select correct "COM " number if you use a Flash cable RS232/DMX or select "Robe Universal Interface 1 "
    if you use the Robe Universal Interface/Robe Universal Interface WTX and then click on the "Connect" button.

7. If the connection is OK, click the "Start Uploading" button to start software uploading. It will take several
   minutes to perform software update.
   If the option "Incremental Update" is not checked, all processors will be updated (including processors with
   the same software version).
   If you wish to update only processors with new version of software, check the "Incremental Update
   box".
   Avoid interrupting the process. Update status is being displayed in the "Info Box" window.
   When the update is finished, the line with the text "Fixture is successfully updated" will appear in
   this window.
In case upload process is interrupted (e.g. power loss), the fixture stays in "Updating mode" and you will have
to repeat the software update again.

Another way, how to update software in the fixtures (especially large installation of fixtures) is to use the ROBE
Uploader. It is a software for automatized software update of Robe fixtures. It takes advantage of RDM
 support).
For more information please see https://www.robe.cz/robe-uploader/.

6. RDM

This fixture supports RDM operation. RDM (Remote Device Management) is a bi-directional communications
protocol for use in DMX512 control systems, it is the new open standard for DMX512 device configuration and
status monitoring.
The RDM protocol allows data packets to be inserted into a DMX512 data stream without adversely affecting
existing non-RDM equipment. By using a special „Start Code," and by complying with the timing specifications
for DMX512, the RDM protocol allows a console or dedicated RDM controller to send commands to and receive
messages from specific moving lights.
RDM allows explicit commands to be sent to a device and responses to be received from it.
The list of commands for the iParfect 150 RGBA (iParfect 150 FW RGBA) is the following.

Parameter ID	Discovery command	SET command	GET command
DISC_UNIQUE_BRANCH	*		
DISC_MUTE	*		
DISC_UN_MUTE	*		
DEVICE_INFO			*
SUPPORTED_PARAMETERS			*
SOFTWARE_VERSION_LABEL			*
DMX_START_ADDRESS		*	*
IDENTIFY_DEVICE		*	*
DEVICE_MODEL_DESCRIPTION			*
MANUFACTURER_LABEL			*
DEVICE_LABEL		*	*
SENSOR_DEFINITION			*
SENSOR_VALUE			*
DISPLAY_INVERT		*	*
DISPLAY_LEVEL		*	*
DEVICE_RESET		*	
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
STATUS_MESSAGES			*
STATUS_ID_DESCRIPTION			*
DEVICE_HOURS			*
PARAMETER_DESCRIPTION			*
ROBE_DMX_INPUT		*	*
ROBE_WIRELESS_UNLINK		*	

RDM model ID for the iParfect 150 FW is 0x00f5.

7. Error and information messages

Short Err

The message informs you that short circuit has occured on the LED PCB.

8. Technical Specifications

Electrical

Power supply: electronic auto-ranging
Input voltage range: 100-240V, 50-60Hz
Max. power consumption: 180W (power factor=0.96)
Fuse:T 3.15A
Mains input: CE - max. 16A
             ETL - max. 10A
Mains output: CE - max. 15A
             ETL - max. 9A

Optic

Light source: 7 x high power RGBW multichip LEDs
Min LED life expectancy: 20.000 hours
RGBA/CMY colour mixing
Variable CTO 2700-8000K
CRI: 91 (white 8000K), 90 (white 5600K), 90 (white 4200K), 80 (white 3200K), 74 (white 2700K)

Virtual colour wheel

66 preset colours
Rainbow effect with in both directions with variable speed

Zoom range

3.8°-60°

Strobe

Strobe effect with variable speed (0.3 - 20Hz)
Random strobe pulse-effect with variable speed
Opening/closing pulse effect with variable speed

Dimmer

Smooth dimmer from 0 - 100 %

Control

2-row LCD display & 4 buttons
Readout fixture usage, receiving DMX values, temperatures, etc
Built-in analyzer for easy fault finding, error messages
Built-in demo sequences
Stand-alone operation
3 user editable programs, each up to 40 steps
Supported protocols: USITT DMX 512, RDM,
Support of RDM (Remote Device Management)
3 DMX modes (17, 11, 8 control channels)
2 control modes (Standard and Easy)

Wireless DMX/RDM module (optional)

Compliance with USITT DMX-512 (1986 & 1990) and 512-A
Full DMX fidelity and frame integrity
Auto sensing of DMX frame rate and frame size
<5ms DMX latency
Operational frequency range of 2402-2480 MHz
Producer: LumenRadio

Connection

DMX data in/out: 5-pin XLR connectors, Neutrik NC5MX-HD (male), Neutrik NC5FX-HD (female)
Power IN/OUT : Neutrik powerCON TRUE1 NAC 3PX
Note: mains cable is optional accessories

Rigging

Via mounting bracket (220° tilt range)

Temperatures

Maximum ambient temperature : +40° C
Minimum ambient temperature: -10°C
Maximum surface temperature : 80° C

Distances

Min. distance from flammable surfaces: 0.4 m
Min. distance of illuminated objects: 0.8 m

Total heat dissipation

460 BTU/h (calculated)

Protection factor

CE: IP 65
US: Suitable for wet locations

Weight

7.3 kg (without Barndoors and Gel Frame)

Dimensions (mm)
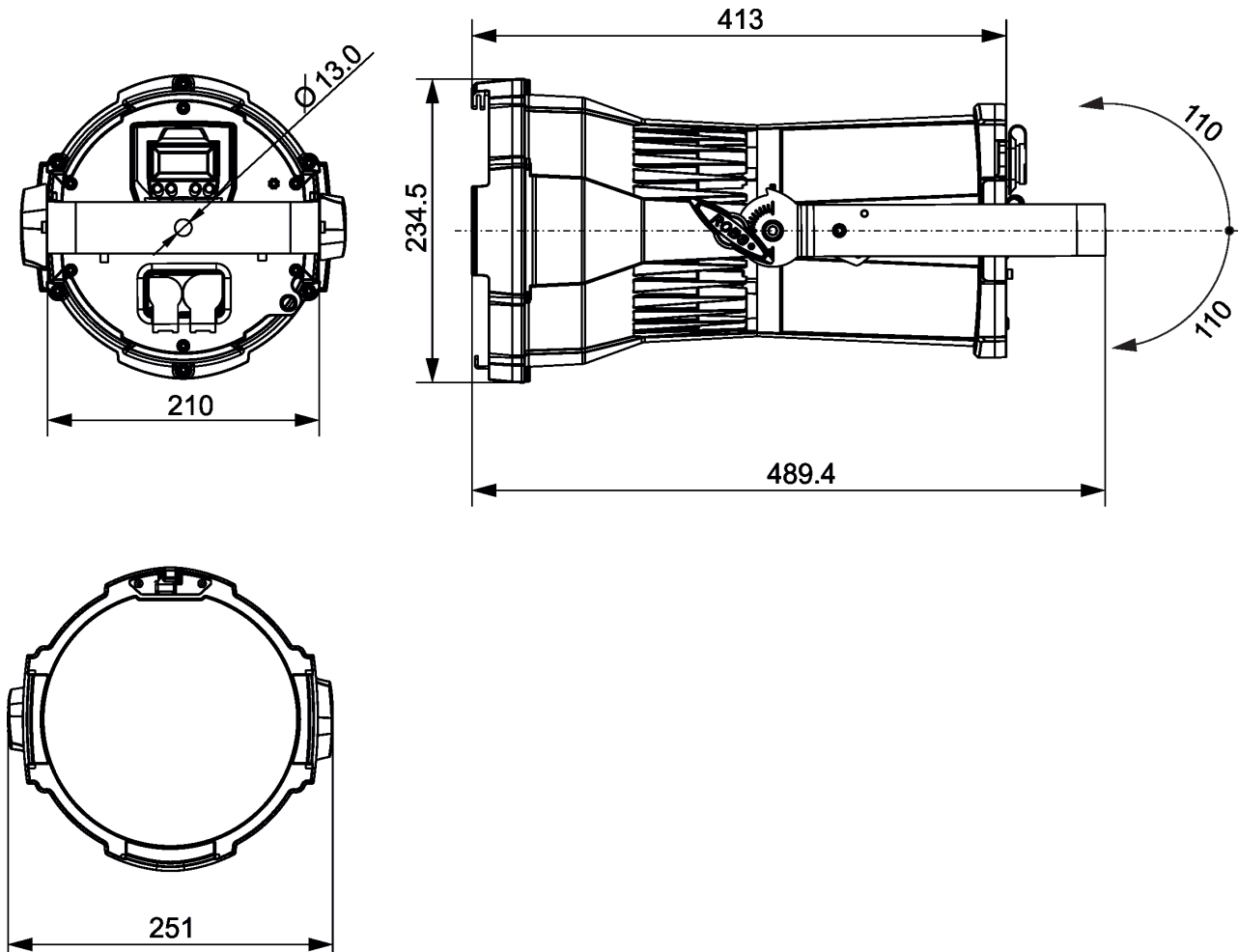
Included items

       1 x ROBIN iParfect 150 FW RGBA (ROBIN iParfect 150 FWQ RGBA)
       1 x User manual

Optional accessories

       (P/N 10980884) Barndoor for iParfect 150 RAL9005
       (P/N 10980372) Gel Frame for Parfect 150
       (P/N 13052276) Mains Cable powerCON TRUE1 In/open ended, EU 2m, Outdoor
       (P/N 13052277) Mains Cable powerCON TRUE1 In/open ended, US 2m, Outdoor
       (P/N 13052278) Daisy Chain powerCON TRUE1 In/Out, EU, 0,75m, Outdoor
       (P/N 13052279) Daisy Chain powerCON TRUE1 In/Out, US, 0,75m, Outdoor
       (P/N 13052280) Daisy Chain powerCON TRUE1 In/Out, EU, 2m, Outdoor
       (P/N 13052281) Daisy Chain powerCON TRUE1 In/Out, US, 2m, Outdoor
       (P/N 17030386) Doughty Trigger Clamp
       (P/N 99011963) Safety wire 35 kg

9. Maintenance and cleaning

> ***Disconnect from the mains before starting any cleaning or service work.***

It is absolutely essential that the fixture front transparent glass is kept clean and dust, dirt and smoke-fluid residues must not build up on the glass. Otherwise, the fixture's light-output will be significantly reduced. Regular cleaning will ensure the maximum light otput.
A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used!

More complicated maintenance and service operations are only to be carried out by authorized distributors.

9.1 Replacing the fuse

Replace the fuse by a fuse of the same type and rating only.

> **Before replacing the fuse, unplug mains lead!**

1. Disconnect the fixture from mains
2. Remove the rear panel (1) from housing by unscrewing the six screws (2).
3. Remove the fuse from the fuse holder (3).
4. Install a new fuse into the fuse holder (only the same type and rating).
5. Screw the rear panel (1) back to the housing by means of the six screws (2). Use a tightening torque of 3 Nm. Check that all screws are firmly screwed.
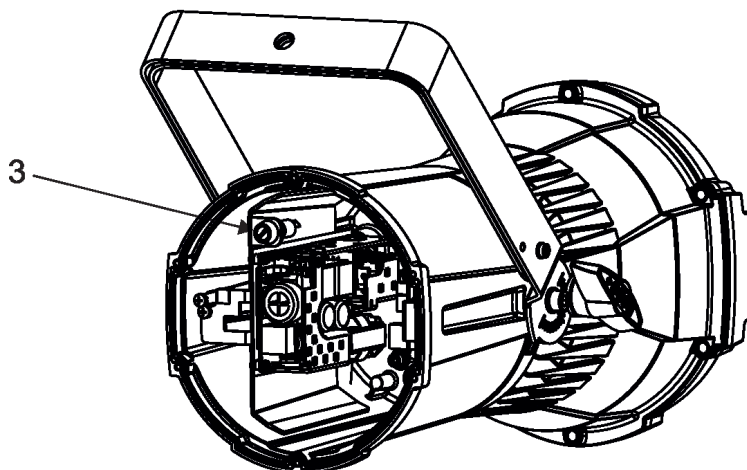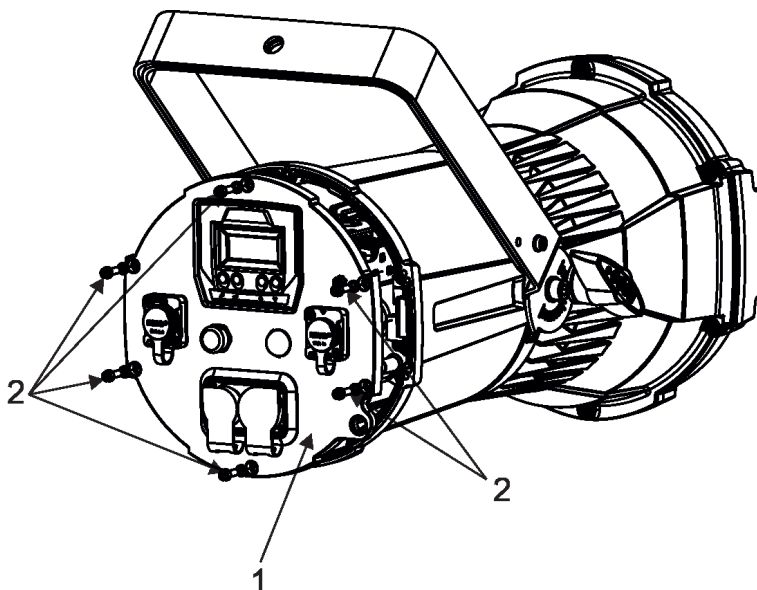
9.2 Disposing of the product

To preserve the environment please dispose or recycle this product at the end of its life according to the local regulations and codes.

10. Photometric diagrams

iParfect 150 FW RGBA / iParfect 150 FWQ RGBA
Min. Zoom

Total Output: 645 lumens
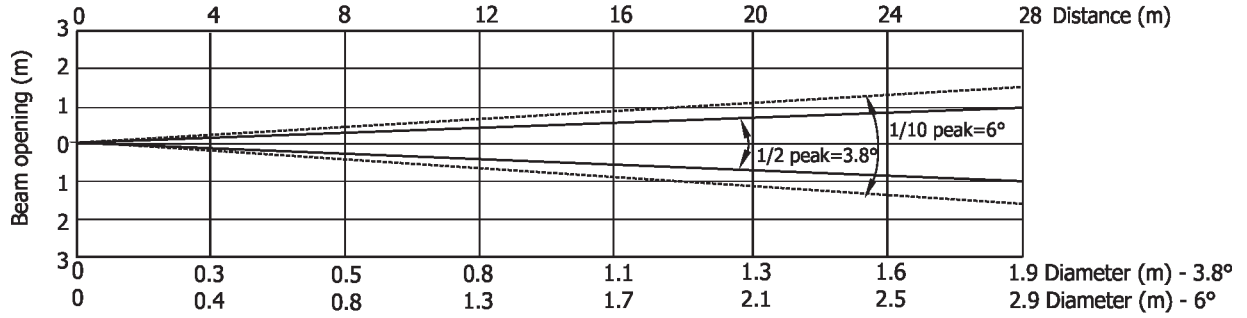
Distance (m)	4	5	8	12	16	20	24	28	
Red	3110/289	1990/185	777/72	345/32	194/18	124/12	86/8	64/6	
Green	5453/507	3490/324	1363/139	605/56	340/32	218/20	150/14	111/10	Intensity (center) Lux/Footcandles
Blue	1328/123	850/79	332/31	148/14	83/8	53/5	37/3.4	27/2.5	
Amber	4726/439	3025/281	1180/110	525/49	295/27	189/18	131/12	96/9	
R+G+B+A	8280/769	5300/492	2070/192	920/86	518/48	331/31	230/21.4	169/15.7	

Illuminance distribution
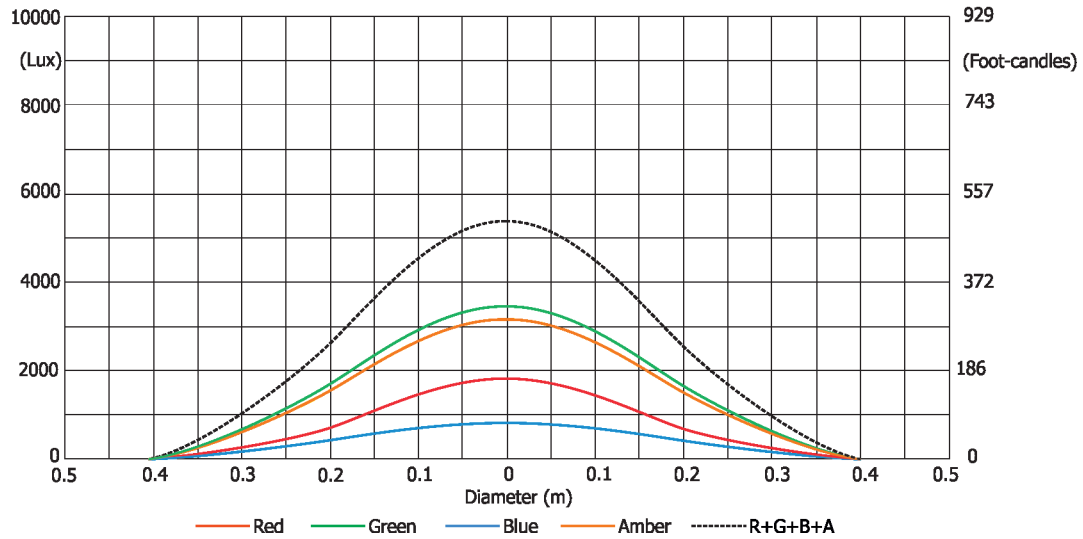
Distance=5m

Max. Zoom

Total Output: 1310 lumens
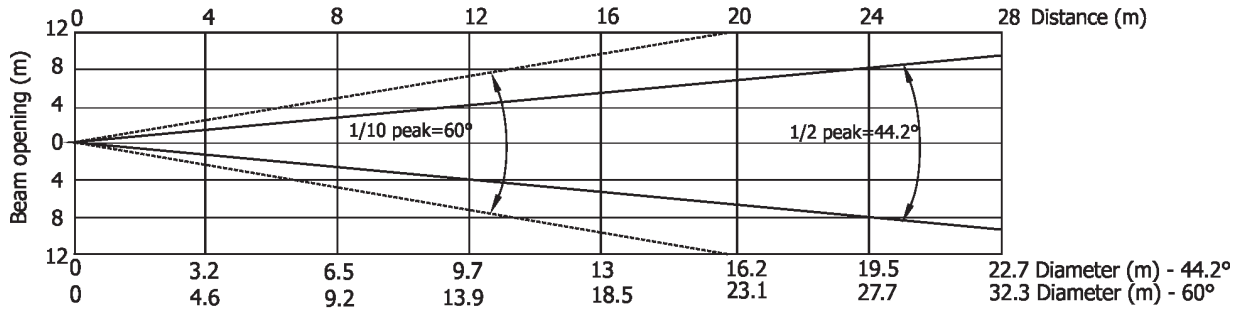
Distance (m)	4	5	8	12	16	20	24	28	
Red	78/7.3	50/4.6	20/1.8	9/0.8	5/0.5	3/0.3	2/0.2	1.6/0.1	
Green	136/13	87/8	34/3.2	15/1.4	9/0.8	5/0.5	4/0.4	3/0.3	
Blue	33/3	21/2	8/0.8	4/0.3	2/0.2	1.3/0.1	0.9/0.1	0.7/0.1	Intensity (center) Lux/Footcandles
Amber	120/11	76/7	30/2.8	13/1.2	7/0.7	5/0.4	3/0.3	2.4/0.2	
R+G+B+A	213/20	136/13	53/5	24/2.2	13/1.2	9/0.8	6/0.5	4/0.4	

Illuminance distribution

Distance=5m

Mode/channel			DMX Value	Function	Type of control
1	**2**	**3**			
1	**1**	*****		**Power/Special functions**	
			0 -9	Reserved (0=default)	
				To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec. („Shutter,Strobe" channel 15/10 must be at range: 0-31 DMX). Corresponding menu items are temporarily overriden.	
			10-14	DMX input: Wired DMX *	step
			15-19	DMX input: Wireless DMX *	step
				* function is active only 10 seconds after switching the fixture on	
			20-24	Display ON	step
			25-29	Display OFF	step
			30-34	RGBA colour mixing mode	step
			35-39	CMY colour mixing mode	step
			40-59	Reserved	
			60 - 64	Dimmer curve - square law	step
			65 - 69	Dimmer curve - linear	step
			70-79	Reserved	
			80-84	White point 8000K ON	step
			85-89	White point 8000K OFF	step
			90-129	Reserved	
				To activate following functions, stop in DMX value for at least 3 seconds. Corresponding menu items are temporarily overriden.	
			130 - 139	Save present DMX values to the fixture as initial DMX values	step
			140 - 149	Reserved	
			150 - 159	Zoom reset	step
			160 - 169	Reserved	
				Tungsten effect simulation for whites 2700K and 3200K	
			170-171	Tungsten effect simulation (750W) On	step
			172-173	Tungsten effect simulation (1000W) On	step
			174-175	Tungsten effect simulation (1200W) On	step
			176-177	Tungsten effect simulation (2000W) On	step
			178-179	Tungsten effect simulation (2500W) On	step
			180-181	Tungsten effect simulation Off	step
			182-184	Reserved	
			185	PWM output frequency of LEDS: Standard (300Hz)**	step
			186	PWM output frequency of LEDS: High **	step
				** You can adjust selected frequency in 6 steps Up or Down around selected frequency - see table below . Default value of PWM frequency set in the fixture is Standard.	
			187	LED Frequency (step -6)	step
			188	LED Frequency (step -5)	step
			189	LED Frequency (step -4)	step
			190	LED Frequency (step -3)	step
			191	LED Frequency (step -2)	step
			192	LED Frequency (step -1)	step
			193	LED Frequency (Standard or High)	step

Table title (spanning header):

Robin iParfect 150 FW RGBA/Robin iParfect 150 FWQ RGBA
Robin iParfect 150 RGBA/Robin iParfect 15Q RGBA
Version: 1.1   **Mode 1**-Standard 16-bit, **Mode 2** -Reduced 8-bit, **Mode3** - RGBA 16-bit

DMX protocol

Mode/channel			DMX Value	Function	Type of control
1	2	3			
			194	LED Frequency (step +1)	step
			195	LED Frequency (step +2)	step
			196	LED Frequency (step +3)	step
			197	LED Frequency (step +4)	step
			198	LED Frequency (step +5)	step
			199	LED Frequency (step +6)	step
			200-255	Reserved	
2	2	*		**Virtual colour wheel**	
			0	No function (0=default)	step
			1-2	Filter 4 (Medium Bastard Amber)	step
			3-4	Filter 25 (Sunset Red)	step
			5-6	Filter 19 (Fire)	step
			7-8	Filter 26 (Bright Red)	step
			9-10	Filter 58 (Lavender)	step
			11-12	Filter 68 (Sky Blue)	step
			13-14	Filter 36 (Medium Pink)	step
			15-16	Filter 89 (Moss Green)	step
			17-18	Filter 88 (Lime Green)	step
			19-20	Filter 90 (Dark Yellow Green)	step
			21-22	Filter 49 (Medium Purple)	step
			23-24	Filter 52 (Light Lavender)	step
			25-26	Filter 102 (Light Amber)	step
			27-28	Filter 103 (Straw)	step
			29-30	Filter 140 (Summer Blue)	step
			31-32	Filter 124 (Dark Green)	step
			33-34	Filter 106 (Primary Red)	step
			35-36	Filter 111 (Dark Pink)	step
			37-38	Filter 115 (Peacock Blue)	step
			39-40	Filter 126 (Mauve)	step
			41-42	Filter 117 (Steel Blue)	step
			43-44	Filter 118 (Light Blue)	step
			45-46	Filter 122 (Fern Green)	step
			47-48	Filter 182 (Light Red)	step
			49-50	Filter 121 (Filter Green)	step
			51-52	Filter 128 (Bright Pink)	step
			53-54	Filter 131 (Marine Blue)	step
			55-56	Filter 132 (Medium Blue)	step
			57-58	Filter 134 (Golden Amber)	step
			59-60	Filter 135 (Deep Golden Amber)	step
			61-62	Filter 136 (Pale Lavender)	step
			63-64	Filter 137 (Special Lavender)	step
			65-66	Filter 138 (Pale Green)	step
			67-68	Filter 798 (Chrysalis Pink)	step
			69-70	Filter 141 (Bright Blue)	step
			71-72	Filter 147 (Apricot)	step
			73-74	Filter 148 (Bright Rose)	step
			75-76	Filter 152 (Pale Gold)	step
			77-78	Filter 154 (Pale Rose)	step

Mode/channel			DMX Value	Function	Type of control
1	2	3			
			79-80	Filter 157 (Pink)	step
			81-82	Filter 143 (Pale Navy Blue)	step
			83-84	Filter 162 (Bastard Amber)	step
			85-86	Filter 164 (Flame Red)	step
			87-88	Filter 165 (Daylight Blue)	step
			89-90	Filter 169 (Lilac Tint)	step
			91-92	Filter 170 (Deep Lavender)	step
			93-94	Filter 172 (Lagoon Blue)	step
			95-96	Filter 194 (Surprise Pink)	step
			97-98	Filter 180 (Dark Lavender)	step
			99-100	Filter 181 (Congo Blue)	step
			101-102	Filter 197 (Alice Blue)	step
			103-104	Filter 201 (Full C.T. Blue)	step
			105-106	Filter 202 (Half C.T. Blue)	step
			107-108	Filter 203 (Quarter C.T. Blue)	step
			109-110	Filter 204 (Full C.T. Orange)	step
			111-112	Filter 219 (Fluorescent Green)	step
			113-114	Filter 206 (Quarter C.T. Orange)	step
			115-116	Filter 247 (Filter Minus Green)	step
			117-118	Filter 248 (Half Minus Green)	step
			119-120	Filter 281 (Three Quarter C.T. Blue)	step
			121-122	Filter 285 (Three Quarter C.T. Orange)	step
			123-124	Filter 352 (Glacier Blue)	step
			125-126	Filter 353 (Lighter Blue)	step
			127-128	Filter 507 (Madge)	step
			129-130	Filter 778 (Millennium Gold)	step
			131-132	Filter 793 (Vanity Fair)	step
			133-235	Raw DMX	proportional
			236-245	Rainbow effect (with fade time) from slow-> fast	proportional
			246-255	Rainbow effect (without fade time) from slow-> fast	proportional
3	3	1		**Red/Cyan (8 bit)***	
			0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
4	*	2		**Red/Cyan (16bit)***	
			0 - 255	Colour saturation control - fine (255=default)	proportional
5	4	3		**Green/Magenta (8 bit) ***	
			0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
6	*	4		**Green/Magenta (16bit) ***	
			0 - 255	Colour saturation control - fine (255=default)	proportional
7	5	5		**Blue/Yellow (8 bit) ***	
			0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
8	*	6		**Blue/ Yellow (16bit) ***	
			0 - 255	Colour saturation control - fine (255=default)	proportional
9	6	7		**Amber (8 bit)***	
				If RGBA mode is selected:	
			0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
				If CMY mode is selected:	
			0 - 255	No function	
10	*	8		**Amber (16 bit)***	

Mode/channel			DMX Value	Function	Type of control
1	2	3			
			0 - 255	Colour saturation control - fine (255=default)	proportional
11	7	*		**CTC**	
				If function "White Point 8000K" is ON	
			0-255	Col. temperature correction from 8000K to 2700K -for whites only	proportional
				(0=8000K, 64=5600K, 128=4200K, 192=3200K, 255=2700K)	
				To get colour temperatures stated above, RGBA channels have to be set at the same value e.g. 255DMX (0=default)	
				(To activate Tungsten effect at 2700K and 3200K , set DMX value at "Power/Special functions" channel)	
				If function "White Point 8000K" is OFF	
			0-255	Colour temperature correction from cool white to 2700K	proportional
12	8	*		**Colour Mix control**	
				Defines relation between colour channels	
				"Virtual" = Virtual Colours (Virtual Colour Wheel)	
				"Colour mix" = Colour channels (RGBA/CMY)	
			0-9	Virtual colors ("Virtual" has priority)	step
			10-19	Maximum mode (highest values have priority)	step
			20-29	Minimum mode (lowest values have priority)	step
			30-39	Multiply mode (multiply Virtual and Colour Mix)	step
			40-49	Addition mode (Virtual + Colour mix) (45=default)	step
			50-59	Subtraction mode (Virtual – Colour mix)	step
			60-69	Inverted Subtraction mode (Colour mix-Virtual)	step
			70-128	Reserved	
			129	Virtual colors (virtual has priority)	step
			130-254	Crossfade (crossfade between Virtual and Colour mix)	proportional
			255	Colour channels ("Colour mix" has priority)	step
13	9	*		**Zoom**	
			0-255	Zoom from max. to min.beam angle (128=default)	proportional
14	*	*		**Zoom - fine**	
			0-255	Fine zooming (0=default)	proportional
15	10	*		**Shutter/ strobe**	
			0 - 31	Shutter closed	step
			32 - 63	Shutter open (32=default)	step
			64 - 95	Strobe-effect from slow to fast	proportional
			96 - 127	Shutter open	step
			128 - 143	Opening pulse in sequences from slow to fast	proportional
			144 - 159	Closing pulse in sequences from fast to slow	proportional
			160 - 191	Shutter open	step
			192 - 223	Random strobe-effect from slow to fast	proportional
			224 - 255	Shutter open	step
16	11	*		**Dimmer intensity (8 bit)**	
			0 - 255	Dimmer intensity from 0% to 100% (0=default)	proportional
17	*	*		**Dimmer intensity - fine (16 bit)**	
			0 - 255	Fine dimming (0=default)	proportional

***Select RGBA or CMY mixing mode on channel "Power/Special functions" .

All Specifications subject to change without notice

Robin iParfect 150 RGBA/150 FW RGBA/iParfect 150Q RGBA/150 FWQ RGBA - colours on Virtual Colour Wheel				
Colour name	Red (DMX)	Green (DMX)	Blue (DMX)	Amber (DMX)
Filter 4 (Medium Bastard Amber)	60	141	33	239
Filter 25 (Sunset Red)	255	9	2	223
Filter 19 (Fire)	255	0	0	36
Filter 26 (Bright Red)	255	0	0	0
Filter 58 (Lavender)	0	47	165	255
Filter 68 (Sky Blue)	0	250	138	45
Filter 36 (Medium Pink)	200	78	26	255
Filter 89 (Moss Green)	0	255	0	80
Filter 88 (Lime Green)	122	255	0	103
Filter 90 (Dark Yellow Green)	2	255	0	0
Filter 49 (Medium Purple)	255	0	27	0
Filter 52 (Light Lavender)	176	221	66	255
Filter 102 (Light Amber)	213	255	0	255
Filter 103 (Straw)	193	255	19	245
Filter 140 (Summer Blue)	74	255	42	51
Filter 124 (Dark Green)	16	255	4	15
Filter 106 (Primary Red)	255	3	1	0
Filter 111 (Dark Pink)	255	116	48	255
Filter 115 (Peacock Blue)	4	255	37	29
Filter 126 (Mauve)	255	0	39	0
Filter 117 (Steel Blue)	130	255	40	55
Filter 118 (Light Blue)	14	255	78	11
Filter 122 (Fern Green)	3	255	4	102
Filter 182 (Light Red)	255	16	2	0
Filter 121 (Filter Green)	143	255	0	0
Filter 128 (Bright Pink)	255	0	31	103
Filter 131 (Marine Blue)	14	255	34	81
Filter 132 (Medium Blue)	7	228	120	0
Filter 134 (Golden Amber)	164	83	0	0
Filter 135 (Deep Golden Amber)	255	50	0	0
Filter 136 (Pale Lavender)	134	123	30	10
Filter 137 (Special Lavender)	129	123	40	10
Filter 138 (Pale Green)	186	255	14	32
Filter 798 (Chrysalis Pink)	49	17	144	32
Filter 141 (Bright Blue)	0	225	62	0
Filter 147 (Apricot)	122	102	5	88
Filter 148 (Bright Rose)	255	30	13	39
Filter 152 (Pale Gold)	97	128	11	102
Filter 154 (Pale Rose)	96	105	11	103
Filter 157 (Pink)	228	85	18	69
Filter 143 (Pale Navy Blue)	0	210	75	73
Filter 162 (Bastard Amber)	208	252	25	184
Filter 164 (Flame Red)	253	0	0	82
Filter 165 (Daylight Blue)	9	255	106	61
Filter 169 (Lilac Tint)	159	194	28	71
Filter 170 (Deep Lavender)	195	177	78	149

Colour name	Red (DMX)	Green (DMX)	Blue (DMX)	Amber (DMX)
Filter 172 (Lagoon Blue)	0	255	71	10
Filter 194 (Surprise Pink)	109	131	55	92
Filter 180 (Dark Lavender)	139	107	126	19
Filter 181 (Congo Blue)	30	0	255	3
Filter 197 (Alice Blue)	75	222	156	26
Filter 201 (Full C.T. Blue)	135	242	64	36
Filter 202 (Half C.T. Blue)	180	255	48	35
Filter 203 (Quarter C.T. Blue)	172	255	40	74
Filter 204 (Full C.T. Orange)	196	155	4	103
Filter 219 (Fluorescent Green)	80	155	23	26
Filter 206 (Quarter C.T. Orange)	137	185	18	92
Filter 247 (Filter Minus Green)	122	175	57	245
Filter 248 (Half Minus Green)	118	199	41	255
Filter 281 (Three Quarter C.T. Blue)	191	255	76	5
Filter 285 (Three Quarter C.T. Orange)	210	182	7	29
Filter 352 (Glacier Blue)	0	173	55	51
Filter 353 (Lighter Blue)	0	222	51	83
Filter 507 (Madge)	255	0	0	109
Filter 778 (Millennium Gold)	190	32	0	143
Filter 793 (Vanity Fair)	255	5	26	48