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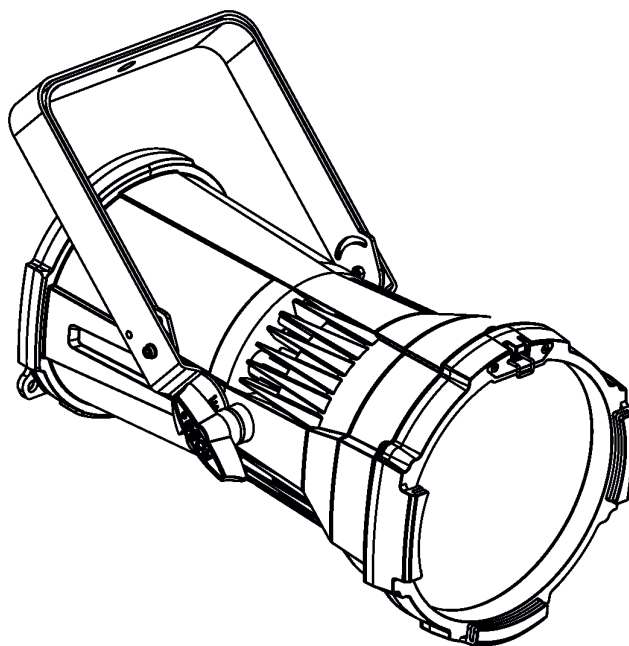
**ROBE**

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# ROBIN iPerfect 150 FW

## ROBIN iPerfect 150 FW

Wireless DMX



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**USER MANUAL**

Version 1.3

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# ROBIN iPerfect 150 FW

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**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY  
BEFORE POWERING OR INSTALLING YOUR iPARFECT 150 FW !**

**Save it for future reference.**

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 FW 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 light source 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 concentrate 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.

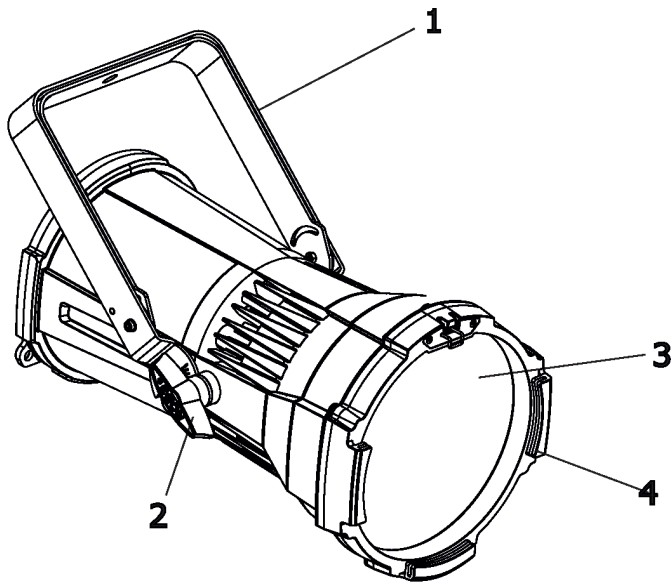
Operate the fixture only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the fixture. Most damages are the result of unprofessional operation!

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

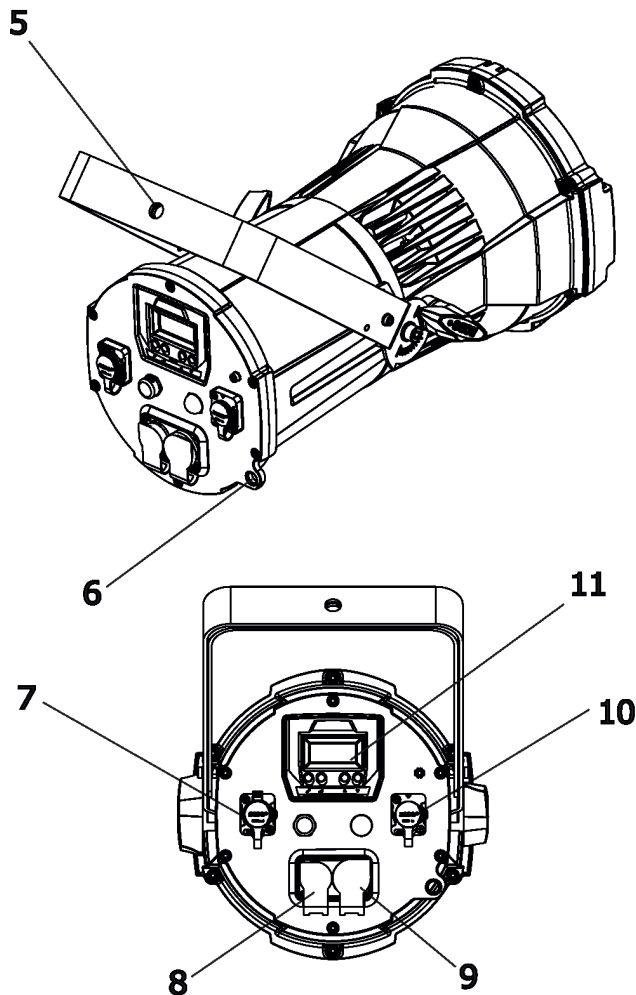
Please consider that unauthorized modifications on the fixture are forbidden due to safety reasons!

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 FW 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 meeting 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:

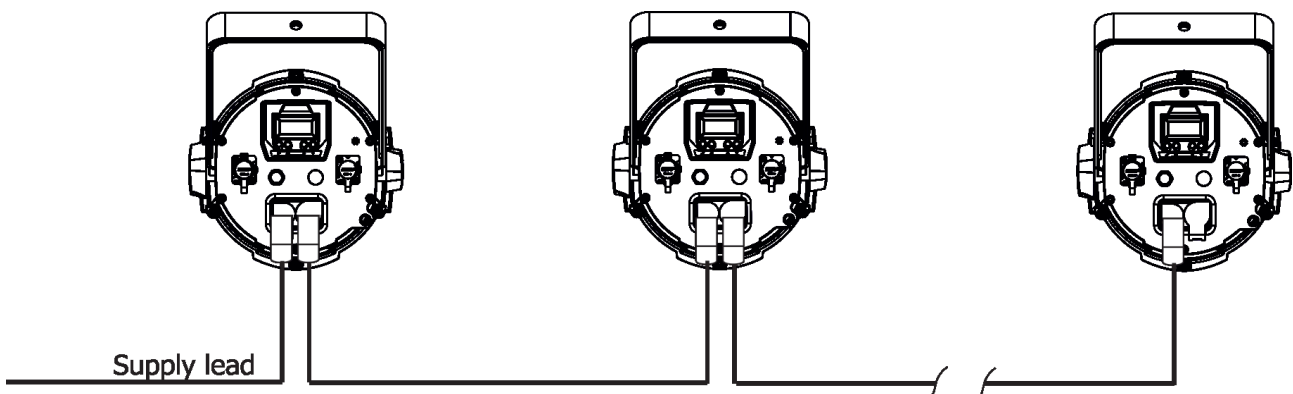
- 15 fixtures at power supply= 230V
- 13 fixtures at power supply= 208V
- 7 fixtures at power supply= 120V

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.

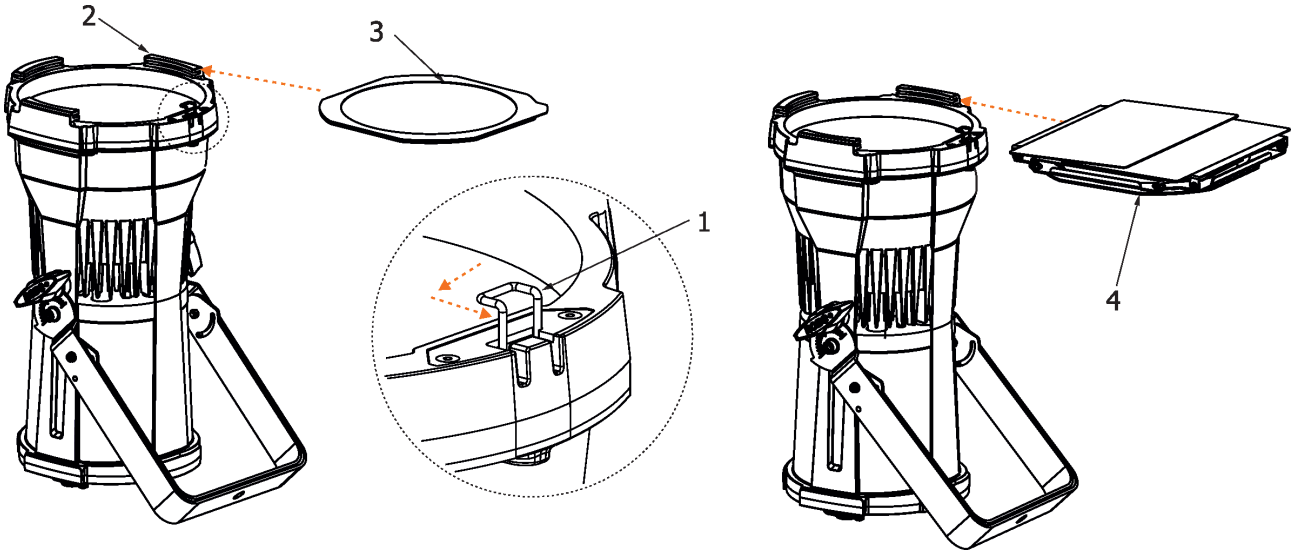
Wiring and connection work must be carried out by qualified staff!



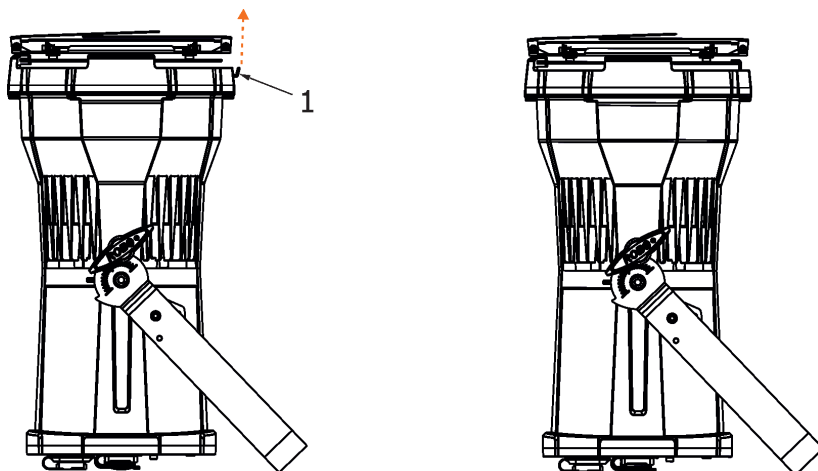
### 3.2 Installing barndoors and the gel frame

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

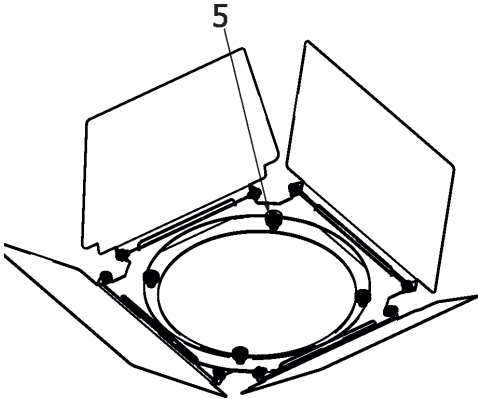
1. Unlock the spring lock (1) of the accessory frame adaptor (2) via pushing this spring lock as show red arrows on the picture.
2. Insert the gel frame (3) into the bottom slots of the accessory frame adaptor (2).
3. Insert the barndoors (4) into the top slots of the frame adaptor (2).



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).





### 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.

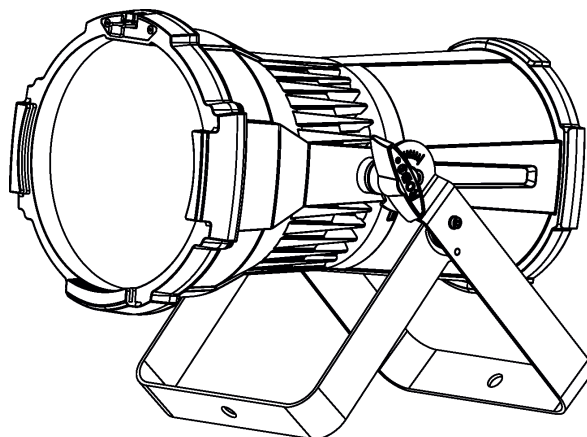
The fixture has to be installed out of the reach of public.

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

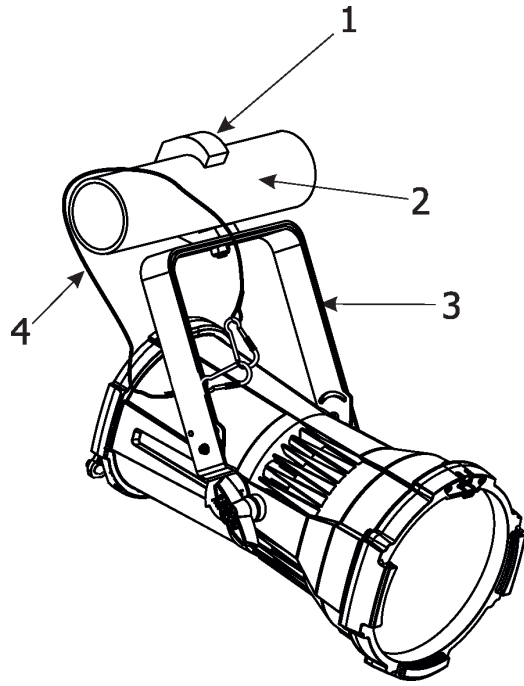
**When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 0.4 m.**

**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

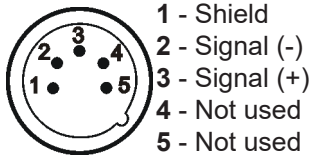
### 3.5 DMX-512 connection

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.

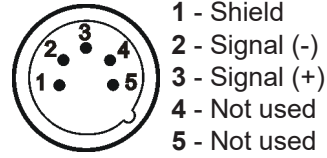
#### DMX output

XLR socket:



#### DMX input

XLR plug:

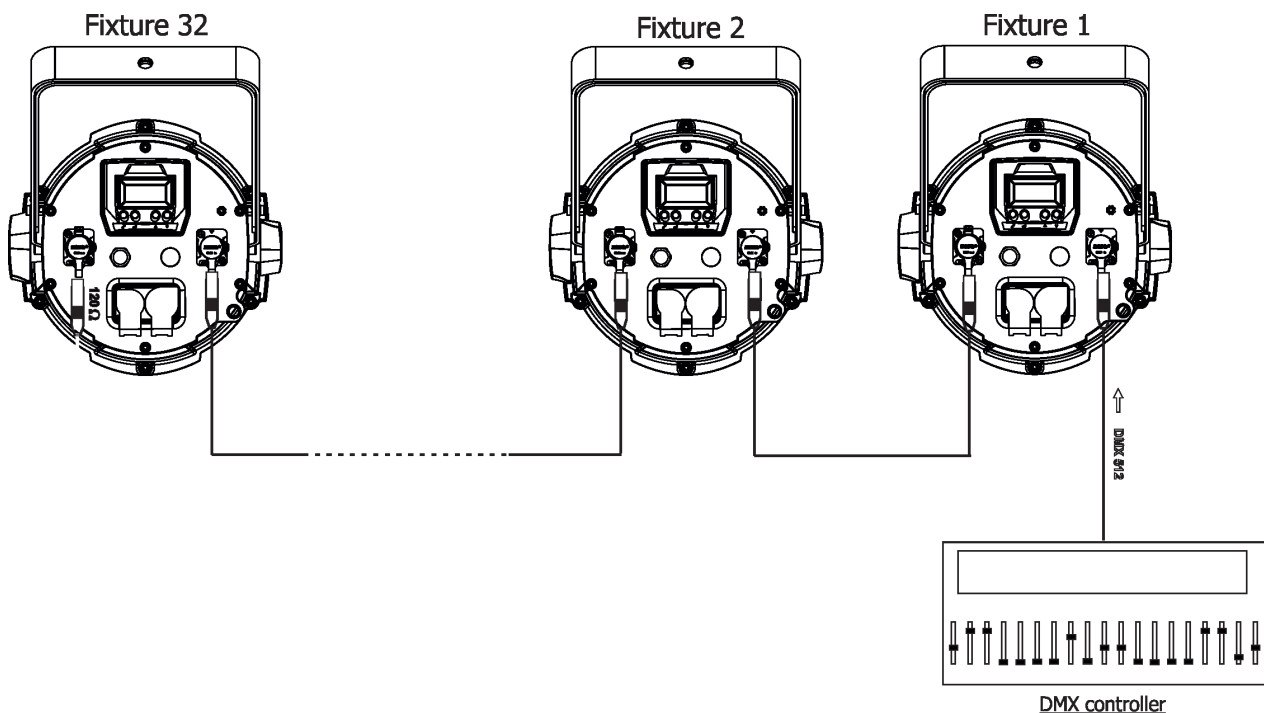


If you use a standard DMX controllers, you can connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX chain. If you wish to connect DMX controller with other XLR outputs, you need to use adaptor cables.

#### 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  $\Omega$  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
<b>DMXA</b>	Set DMXA	001-512				
		DMX Pres	<b>Mode 1</b>			
			Mode 2			
			Mode 3			
<b>Info</b>	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			
<b>Pers</b>						
		DMX Pres	<b>Mode 1</b>			
			Mode 2			
			Mode 3			
		DMX In	<b>Wired</b>			
			Wireless			
		Display	Turn			
			On/Off T	<b>On, Off</b>		
			Contrast	0-100%		
			Backlight	0-100%		
		Col Mix	<b>RGBW, CMY</b>			
		White P	<b>On, Off</b>			
		Dimmer C	<b>Square, Linear</b>			
		LED Freq	Stand			
			High			
		LED Fadj	-06,-05..00..05, 06			
		Temp Uni	<b>°C, °F</b>			
		I Ef Pos	Powr			
			:			
			Dimm F			
		Store				
	Defaults					
<b>Manual</b>	Manual C	Powr	0-255			
		:				
		Dim F	0-255			
<b>Test Prg</b>						
<b>Sta Alone</b>						
		Auto Run	<b>Off</b>			
			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	
<b>Reset</b>						
<b>Special</b>	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	
				Whi C	0-255	
				Store		
			Cal Load			
	Sw Upd	On, <b>Off</b>				

## 5. Control menu (Standard and Easy control mode)

The iParfect 150 FW 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:

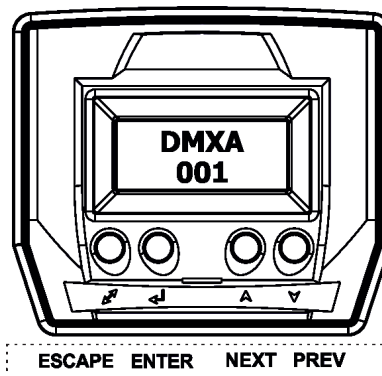
### Standard control mode (default setting)

↖ - 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.

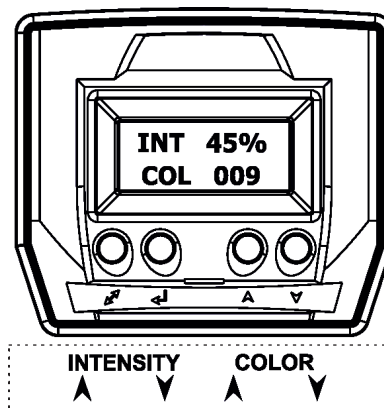


### Easy control mode

[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 FW off.

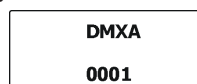


When the fixture is switched off, both adjusted color and light intensity are saved into memory and loaded after switching the fixture on.

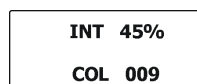
Note: DMX control in this mode is disabled.

### Switching the fixture to Easy control mode

When the current DMX address is displayed in the Standard control mode:



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



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.

The following menu items are accessible in the Standard control mode only.

## 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 FW will respond to the controller.

If you set, for example, the address 31, the iParfect 150 FW 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 FW 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 FW has been fabricated.

**Reset** - The item shows the number of the operation hours that the iParfect 150 FW 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 (wireless 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 RGBW or CMY mode. In the CMY mode, the white(8bit) and white (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 RGBW channels have to be full (255 DMX) 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.

**IEf 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.

**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 FW.

## 5.6 Stand-alone (St Alone)

The iParfect 150 FW 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)
White	a white LEDs saturation (coarse)
White F	a white 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 (coarse)
Dim F	a dimmer (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 output 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 RGBW and white point 8000K "White P" to On (Pers-> Col Mix -> RGBW, Pers-> White P -> On).

3. Enter the menu "Cal Col".
4. By means of the items "Red C, Gre C, Blu C and Whi 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 controller for both calibrations stated above, calibration protocol is the following:

<b>Effect</b>	<b>Mode 1</b>	<b>Mode 2</b>	<b>Mode 3</b>
Fine adjustment of zoom position	channel 18	channel 12	channel 6
Fine adjustment of red LEDs saturation	channel 19	channel 13	channel 7
Fine adjustment of green LEDs saturation	channel 20	channel 14	channel 8
Fine adjustment of blue LEDs saturation	channel 21	channel 15	channel 9
Fine adjustment of white LEDs saturation	channel 22	channel 16	channel 10

**Cal Load** - Loads default (factory) calibration.

**Sw Upd - Software update.** The menu item allows you to update software in the fixture.

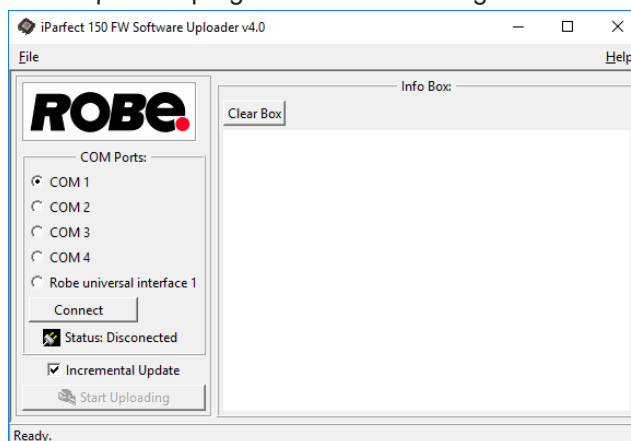
The following items are required in order to update software:

- 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 values.

To update software in the fixture:

1. DSU file is available from Robe web site at [WWW.robe.cz](http://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\_iParfect150\_17080432.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\_iParfect150\_17080432.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 in the unit.

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 FW 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 occurred on the LED PCB.

## 8. Technical Specifications

### **Electrical**

Power supply: electronic auto-ranging  
Input voltage range: 100-240V, 50-60Hz  
Fuse:T 3.15A  
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  
RGBW/CMY colour mixing  
Variable CTO 2700-8000K  
CRI: 77 (white 8000K), 72 (white 5600K), 65 (white 4200K), 44 (white 3200K), 33 (white 2700K)

### **Virtual colour wheel**

66 preset colours  
Halogen lamp effect at whites 2700K and 3200K  
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, 5 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

**Rigging**

Via mounting bracket (220° tilt range)

**Temperatures**

Maximum ambient temperature : 40° 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**

615 BTU/h (calculated)

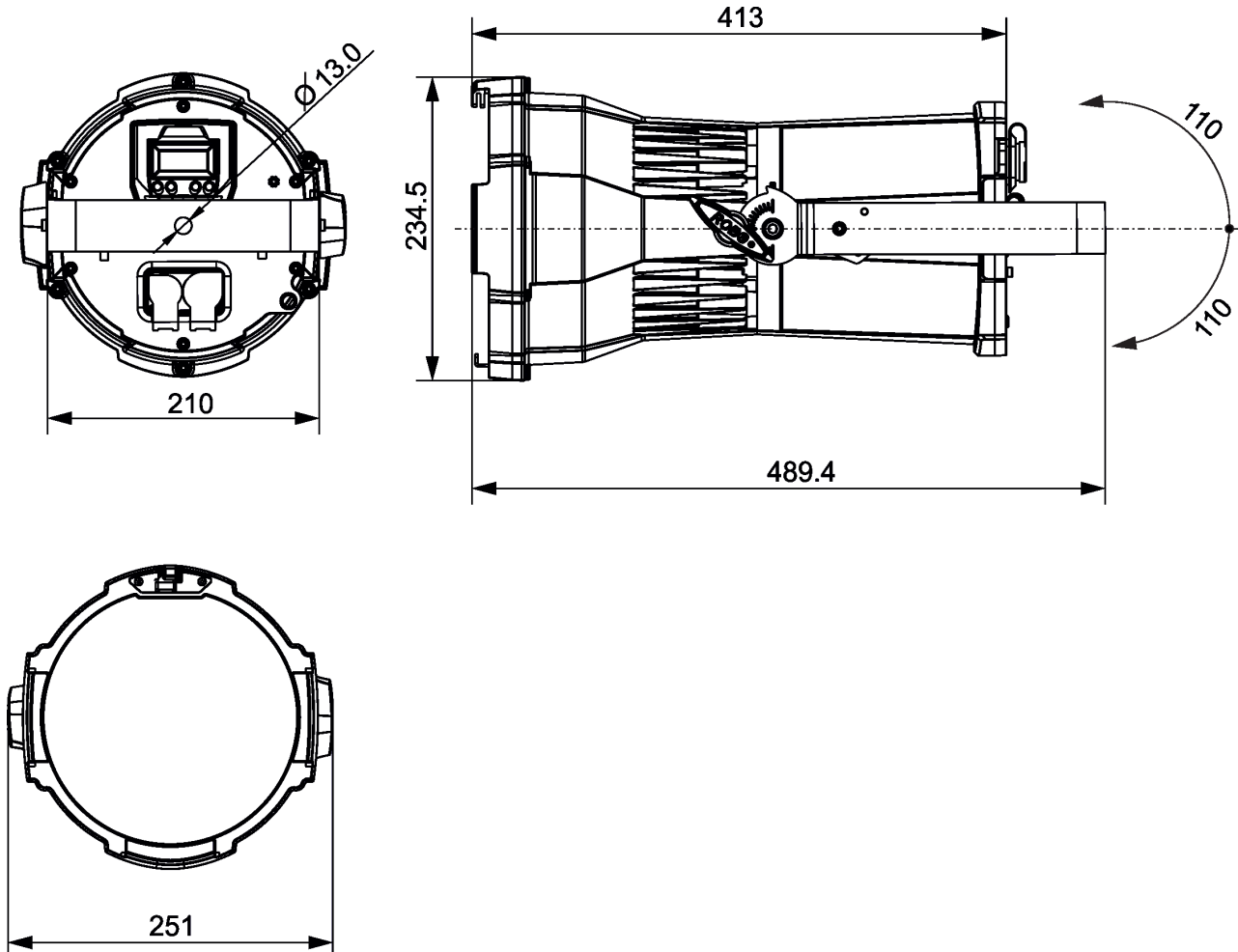
**Protection factor**

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
- 1 x User manual

## Optional accessories

- (P/N 10980349) Barndoor for Robin ParFect 150 black
- (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 output.

A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used!

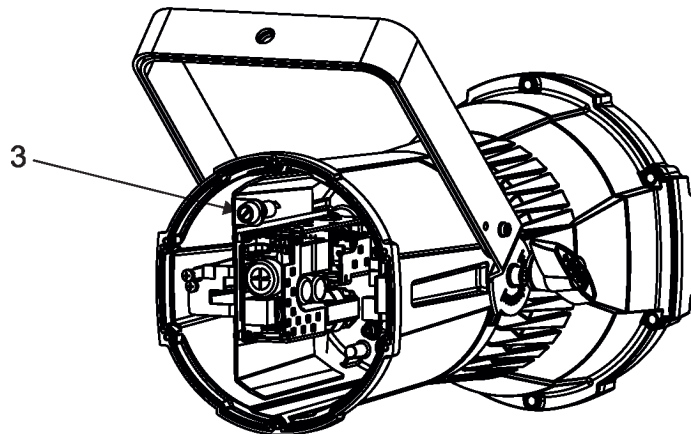
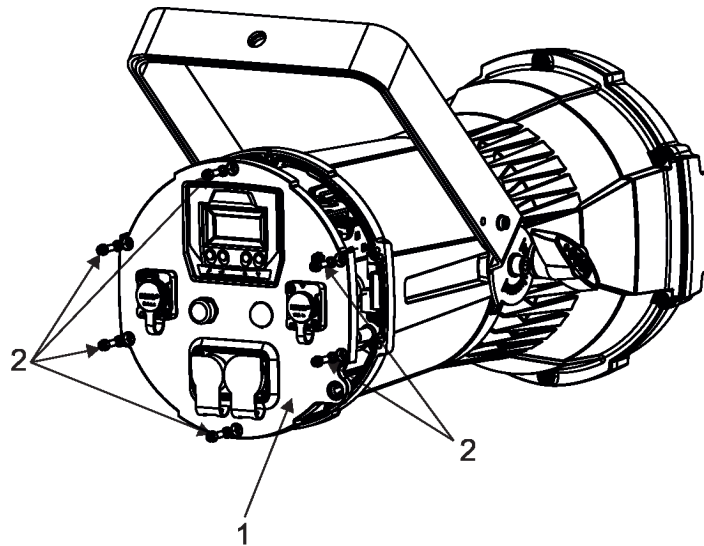
More complicated maintenance and service operations are only to be carried out by authorized distributors.

## 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 (only the same type and rating) into the fuse holder.
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

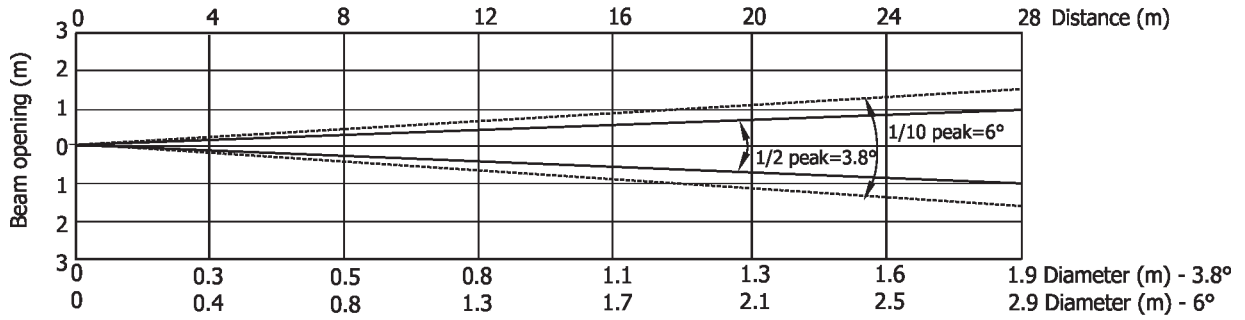
To preserve the environment please dispose or recycle this product at the end of its life according to the local regulations and codes.



# 10. Photometric diagrams

## Min. Zoom

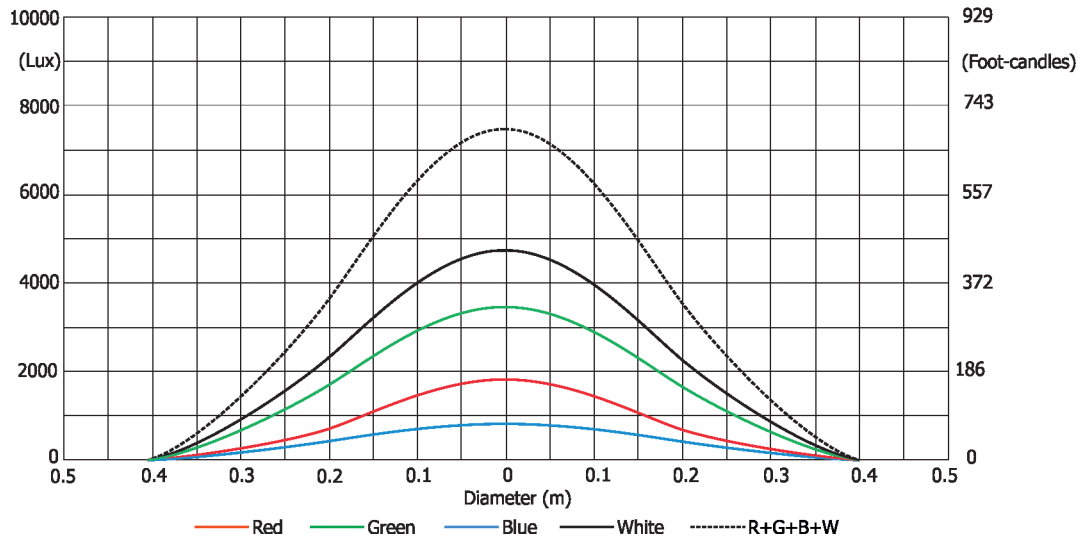
Total Output: 824 lumens



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	Intensity (center) Lux/Footcandles
Green	5453/507	3490/324	1363/139	605/56	340/32	218/20	150/14	111/10	
Blue	1328/123	850/79	332/31	148/14	83/8	53/5	37/3.4	27/2.5	
White	7515/698	4810/447	1880/175	835/78	470/44	300/28	109/19	153/14	
R+G+B+W	10625/987	6800/632	2656/247	1180/110	664/62	425/40	295/27	217/20	

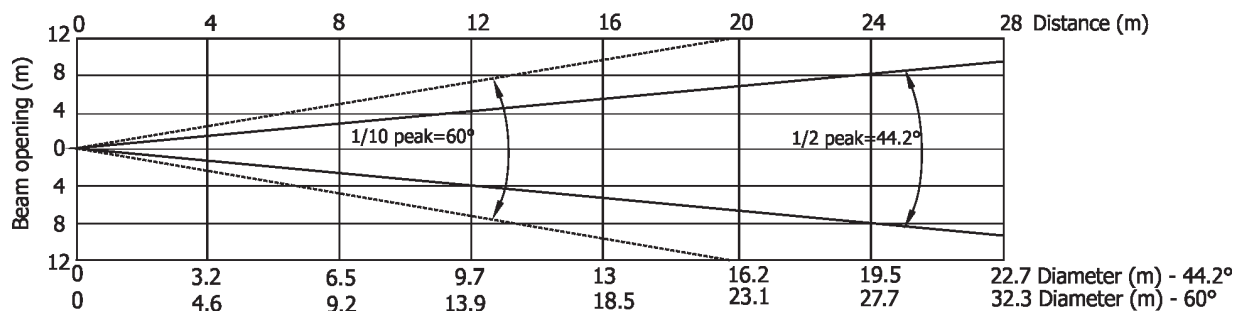
## Illuminance distribution

Distance=5m



## Max. Zoom

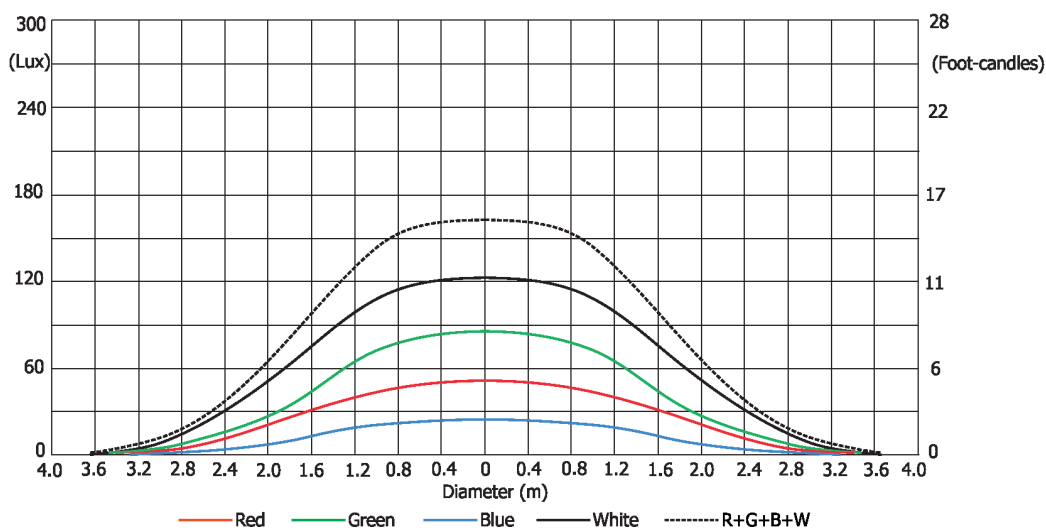
Total Output: 1676 lumens



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	Intensity (center) Lux/Footcandles
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	
White	190/18	122/11.3	48/4.4	21/2	12/1.1	8/0.7	5/0.5	4/0.3	
R+G+B+W	272/25	174/16	68/6	30/2.8	17/1.6	11/1	8/0.7	6/0.5	

## Illuminance distribution

Distance=5m



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Specifications are subject to change without notice.

May 22 2019

Made in ROBE Lighting s.r.o., Palackého 416, 757 01 Valašské Meziříčí, Czech Republic

## DMX protocol

<b>Robin iParfect 150 FW</b>				
Version: 1.0 <b>Mode 1</b> -Standard 16-bit, <b>Mode 2</b> -Reduced 8-bit				
Mode/channel		DMX Value	Function	Type of control
1	2			
<b>1</b>	<b>1</b>		<b>Power/Special functions</b>	
		0 -19	Reserved (0=default) <i>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 20/15 must be at range: 0-31 DMX). Corresponding menu items are temporarily overridden.</i>	
		20-24	Display ON	step
		25-29	Display OFF	step
		30-34	RGBW 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 <i>To activate following functions, stop in DMX value for at least 3 seconds.</i>	
		130 - 149	Reserved	
		150 - 159	Zoom reset	step
		160 - 169	Reserved <i>Tungsten effect simulation for whites 2700K and 3200K</i>	
		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
		182-255	Reserved	
<b>2</b>	<b>2</b>		<b>Virtual colour wheel</b>	
		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

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		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
		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

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		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
<b>3</b>	<b>3</b>		<b>Red/Cyan (8 bit)*</b>	
		0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
<b>4</b>	<b>*</b>		<b>Red/Cyan (16bit)*</b>	
		0 - 255	Colour saturation control - fine (255=default)	proportional
<b>5</b>	<b>4</b>		<b>Green/Magenta (8 bit) *</b>	
		0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
<b>6</b>	<b>*</b>		<b>Green/Magenta (16bit) *</b>	
		0 - 255	Colour saturation control - fine (255=default)	proportional
<b>7</b>	<b>5</b>		<b>Blue/Yellow (8 bit) *</b>	
		0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
<b>8</b>	<b>*</b>		<b>Blue/ Yellow (16bit) *</b>	
		0 - 255	Colour saturation control - fine (255=default)	proportional
<b>9</b>	<b>6</b>		<b>White (8 bit)</b>	
			<i>If RGBW mode is selected:</i>	
		0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
			<i>If CMY mode is selected:</i>	
		0 - 255	No function	
<b>10</b>	<b>*</b>		<b>White (16 bit)</b>	
		0 - 255	Colour saturation control - fine (255=default)	proportional
<b>11</b>	<b>7</b>		<b>CTC</b>	
			<i>If function "White Point 8000K" is ON</i>	
		0-255	Col. temperature correction from 8000K to 2700K -for whites only (0=8000K, 64=5600K, 128=4200K, 192=3200K, 255=2700K) To get colour temperatures stated above, RGBW 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)	proportional
			<i>If function "White Point 8000K" is OFF</i>	
		0-255	Colour temperature correction from cool white to 2700K	proportional
<b>12</b>	<b>8</b>		<b>Colour Mix control</b>	
			<i>Defines relation between colour channels</i>	
			"Virtual" = Virtual Colours (Virtual Colour Wheel)	
			"Colour mix" = Colour channels (RGBW/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
<b>13</b>	<b>9</b>		<b>Zoom</b>	

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		0-255	Zoom from max. to min.beam angle (128=default)	proportional
<b>14</b>	<b>*</b>		<b>Zoom - fine</b>	
		0-255	Fine zooming (0=default)	proportional
<b>15</b>	<b>10</b>		<b>Shutter/ strobe</b>	
		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
<b>16</b>	<b>11</b>		<b>Dimmer intensity (8 bit)</b>	
		0 - 255	Dimmer intensity from 0% to 100% (0=default)	proportional
<b>17</b>	<b>*</b>		<b>Dimmer intensity - fine (16 bit)</b>	
		0 - 255	Fine dimming (0=default)	proportional
*Select RGBW or CMY mixing mode on channel "Power/Special functions" .				
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All Specifications subject to change without notice				

<b>Robin iParfect 150 FW - colours on Virtual Colour Wheel</b>				
<b>Colour name</b>	<b>Red (DMX)</b>	<b>Green (DMX)</b>	<b>Blue (DMX)</b>	<b>White (DMX)</b>
Filter 4 (Medium Bastard Amber)	255	118	0	109
Filter 25 (Sunset Red)	255	47	0	3
Filter 19 (Fire)	255	13	0	0
Filter 26 (Bright Red)	255	0	0	0
Filter 58 (Lavender)	117	0	97	155
Filter 68 (Sky Blue)	31	219	105	6
Filter 36 (Medium Pink)	255	74	8	24
Filter 89 (Moss Green)	69	245	0	3
Filter 88 (Lime Green)	187	226	0	0
Filter 90 (Dark Yellow Green)	2	255	0	0
Filter 49 (Medium Purple)	255	0	27	0
Filter 52 (Light Lavender)	232	88	6	166
Filter 102 (Light Amber)	223	164	0	0
Filter 103 (Straw)	191	144	0	28
Filter 140 (Summer Blue)	0	149	3	220
Filter 124 (Dark Green)	29	255	0	12
Filter 106 (Primary Red)	242	1	1	0
Filter 111 (Dark Pink)	255	67	11	49
Filter 115 (Peacock Blue)	0	255	29	43
Filter 126 (Mauve)	255	0	39	0
Filter 117 (Steel Blue)	179	255	14	197
Filter 118 (Light Blue)	0	255	76	30
Filter 122 (Fern Green)	98	255	0	4
Filter 182 (Light Red)	255	16	2	0
Filter 121 (Filter Green)	165	255	0	0
Filter 128 (Bright Pink)	255	0	13	32
Filter 131 (Marine Blue)	73	245	27	30
Filter 132 (Medium Blue)	0	230	120	0
Filter 134 (Golden Amber)	166	83	0	0
Filter 135 (Deep Golden Amber)	255	50	0	0
Filter 136 (Pale Lavender)	140	101	25	40
Filter 137 (Special Lavender)	110	60	45	102
Filter 138 (Pale Green)	241	255	4	48
Filter 798 (Chrysalis Pink)	49	0	98	26
Filter 141 (Bright Blue)	0	225	62	5
Filter 147 (Apricot)	190	107	0	15
Filter 148 (Bright Rose)	255	3	0	37
Filter 152 (Pale Gold)	179	119	0	39
Filter 154 (Pale Rose)	214	118	0	48
Filter 157 (Pink)	255	56	5	43
Filter 143 (Pale Navy Blue)	0	193	67	148
Filter 162 (Bastard Amber)	211	153	6	36
Filter 164 (Flame Red)	255	27	0	4
Filter 165 (Daylight Blue)	23	236	93	81
Filter 169 (Lilac Tint)	185	123	0	109
Filter 170 (Deep Lavender)	235	123	41	37
Filter 172 (Lagoon Blue)	0	255	63	5

<b>Colour name</b>	<b>Red (DMX)</b>	<b>Green (DMX)</b>	<b>Blue (DMX)</b>	<b>White (DMX)</b>
Filter 194 (Surprise Pink)	110	0	21	255
Filter 180 (Dark Lavender)	136	43	181	120
Filter 181 (Congo Blue)	24	0	255	9
Filter 197 (Alice Blue)	79	193	154	36
Filter 201 (Full C.T. Blue)	153	223	66	156
Filter 202 (Half C.T. Blue)	255	248	34	116
Filter 203 (Quarter C.T. Blue)	245	213	14	147
Filter 204 (Full C.T. Orange)	230	131	3	3
Filter 219 (Fluorescent Green)	99	148	16	50
Filter 206 (Quarter C.T. Orange)	199	152	0	60
Filter 247 (Filter Minus Green)	255	79	0	187
Filter 248 (Half Minus Green)	255	138	0	112
Filter 281 (Three Quarter C.T. Blue)	225	255	99	189
Filter 285 (Three Quarter C.T. Orange)	181	121	0	15
Filter 352 (Glacier Blue)	0	161	49	90
Filter 353 (Lighter Blue)	0	115	21	97
Filter 507 (Madge)	255	31	0	0
Filter 778 (Millennium Gold)	255	65	0	0
Filter 793 (Vanity Fair)	255	0	13	16