

irLEDFLAT

5 x 12SIXb-Air

USER GUIDE

10525 - July 2016 Version 1.0

1 - Safety information

Important safety information



This unit is intended for indoor use only. Do not use it in a wet, or extremely cold/hot locations. Failure to follow these safety instructions could result in fire, electric shock, injury, or damage to this product or other property.



Any maintenance procedure must be performed by a CONTEST authorised technical service. Basic cleaning operations must thoroughly follow our safety instructions.



This product contains non-isolated electrical components. Do not undertake any maintenance operation when it is switched on as it may result in electric shock.

Symbols used



This symbol signals an important safety precaution.



The WARNING symbol signals a risk to the user's physical integrity. The product may also be damaged.



The CAUTION symbol signals a risk of product deterioration.

Instructions and recommendations

1 - Please read carefully :

We strongly recommend to read carefully and understand the safety instructions before attempting to operate this unit.

2 - Please keep this manual :

We strongly recommend to keep this manual with the unit for future reference.

3 - Operate carefully this product :

We strongly recommend to take into consideration every safety instruction.

4 - Follow the instructions:

Please carefully follow each safety instruction to avoid any physical harm or property damage.

5 - Avoid water and wet locations :

Do not use this product in rain, or near washbasins or other wet locations.

6 - Installation :

We strongly encourage you to only use a fixation system or support recommended by the manufacturer or supplied with this product. Carefully follow the installation instructions and use the adequate tools.

Always ensure this unit is firmly fixed to avoid vibration and slipping while operating as it may result in physical injury.

7 - Ceiling or wall installation :

Please contact your local dealer before attempting any ceiling or wall installation.

8 - Ventilation :

The cooling vents ensure a safe use of this product, and avoid any overheating risk. Do not obstruct or cover these vents as it may result in overheating and potential physical injury or product damage. This product should never be operated in a closed non-ventilated area such as a flight case or a rack, unless cooling vents are provided for the purpose.

WARNING : This unit contains no user-serviceable parts. Do not open the housing or attempt any maintenance by yourself. In the unlikely even your unit may require service, please contact your nearest dealer.



In order to avoid any electrical malfunction, please do not use any multi-socket, power cord extension or connecting system without making sure they are perfectly isolated and present no defect.



Warning

This product is equipped with Class 2 LEDs. Please avoid looking directly at the beam as it may cause severe eye injuries.

Recycling your device



- As HITMUSIC is really involved in the environmental cause, we only commercialise clean, ROHS compliant products.
- When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

9 - Heat exposure :

Sustained contact or proximity with warm surfaces may cause overheating and product damages. Please keep this product away from any heat source such as a heaters, amplifiers, hot plates, etc...

10 - Electric power supply :

This product can only be operated according to a very specific voltage. These information are specified on the label located at the rear of the product.

11 - Power cords protection:

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at lugs, convenience receptacles and the point where they exit from the fixture.

12 - Cleaning precautions :

Unplug the product before attempting any cleaning operation. This product should be cleaned only with accessories recommended by the manufacturer. Use a damp cloth to clean the surface. Do not wash this product.

13 - Long periods of non use :

Disconnect the unit's main power during long periods of non use.

14 - Liquids or objects penetration :

Do not let any object penetrate this product as it may result in electric shock or fire. Never spill any liquid on this product as it may infiltrate the electronic components and result in electric shock or fire.

15 - This product should be serviced when :

- Please contact the qualified service personnel if :
- The power cord or the plug has been damaged.
 - Objects have fallen or liquid has been spilled into the appliance.
 - The appliance has been exposed to rain or water.
 - The product does not appear to operate normally.
 - The product has been damaged.

16 - Inspection/maintenance :

Please do not attempt any inspection or maintenance by yourself. Refer all servicing to qualified personnel.

17 - Operating environment :

Ambient temperature and humidity: +5 - +35°C, relative humidity must be less than 85% (when cooling vents are not obstructed).

Do not operate this product in a non-ventilated, very humid or warm place.

2 - Introduction

Long range wireless DMX transmitter and receiver. Air-Box and AirLED compatible.

This projector is equipped with 5 super-powerful RGBWA+UV LEDs with high-performance individual lenses.

In addition to primary colours (such as blue, red, green...) the white shades and Amber create warm and brightful colours. On top of that, UV light is used to enhance white shades, turning them into an intense phosphorescent white. And when UV light is added to stronger colours it emphasizes their contrast, deepen their shade and you obtain a whole new palette of exclusive colours.

The irLEDFLAT-5x12SIXb is supplied with an infrared remote control to access colour control, built-in programs, DMX settings and a lot more.

It also has a new double mounting bracket revolutionising ground handling. Thanks to the automatic abutment point, tightening the projector is independent from the mounting bracket blocking. You can now manipulate and adjust the projector with an optimal stability.

3 - Technical specifications

• Its strengths:

- 6-in-1 LEDs
- Brightness
- Natural colours and light, exclusive UV shades
- Wireless airDMX transmitter and receiver integrated
- Manual, music-sensitive and DMX modes, customisable user programs, built-in programs.
- 6-colour remote control supplied
- Infrared sensor (front) + infrared repeater system with 1m cable
- Power input/output

• Functions:

- **AirDMX :**
 - Wireless air DMX transmitter en receiver
 - 100 m average range in open area
 - 2.4 GHz frequency band
 - AirBox-ER1 compatible
- **Built-in command panel with digital drop-down display for :**
 - DMX addressing
 - Choosing the number of channels: 2 - 9
 - Choosing the built-in programs
 - Choosing the preset colours
 - Master/Slave mode
 - Music-sensitive mode and choosing the mic sensitivity
 - Edit and play your own 20-step program
 - General dimmer to adjust the brightness of the fixed colours, macros and user program
 - Infrared remote control giving you access to every remote function

• Optical:

- 5x12W Six-in-one LEDs (RGBWA+UV) - 30,000 hours (average)
- Beamwidth : 40°

• Connectors :

- DMX IN and OUT via 3-pin XLR,
- POWER IN/OUT via an IEC socket

• Power supply: 110/240 V 50/60 Hz

• Power consumption: 160 W

• Finish: Black

• Dimensions : 240 x 265 x 110 mm

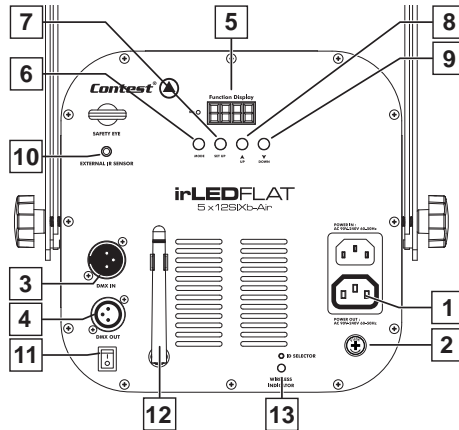
• Weight : 2.8 kg

• Package contents:

The package must contain the following products :

- A projector
- A user guide
- A double mounting bracket
- An infrared remote control
- A 2-pole + earth power cord
- An infrared repeater system with 1m cable

4 - Description



1 Power input/output socket

Allows you to connect the projector to an electrical outlet and to link several projectors together via a Male/Female IEC cord. Please make sure the voltage is in adequation with the product indications.
Caution : Do NOT go over 700W on the same power source.

2 Fuse

If need to replace the fuse, please make sure the new fuse has exactly the same characteristics as the original one.

3 DMX input

3-pin female XLR plug hardwired as follows :

- Mass: 1
- Negative signal: 2
- Positive signal: 3

4 DMX output

3-pin male XLR plug hardwired as follows :

- Mass: 1
- Negative signal: 2
- Positive signal: 3

5 Display

This intuitive display allows you to configure your projector. Please refer to the next paragraphs for more details about the projector configuration.

6 MODE button

Allows you to access menus and select a function.

7 SETUP button

Allows you to configure the parameters of the functions chosen with the MODE button.

8 UP button

Press UP to increase the adjustable values or browse the sub-menus.

9 Touche DOWN

Press DOWN to decrease the adjustable values or browse the sub-menus.

10 Infrared receiver input

This Jack 3.5 plug allows you to connect the infrared repeater system.

This receiver can be used when the front sensor of the projector is too far to receive the remote control commands.

11 Wifi switch

Allows you to switch on or off the wireless DMX module

12 Wifi antenna

The antenna can be oriented to get better range

13 Wireless DMX module

The button allows to select the WIFI channel. 7 channels are available. The LED WIRELESS INDICATOR has a different colour for each channel. Refer to paragraph 5 for more details.

5 - Installation

The WiFi transmission system allows you to synchronise several units without using any DMX cable. You can synchronise several units by using the master/slave mode or like any regular DMX daisy-chaining installation. The units must use the same communication channel to be synchronised. To do so, use the ID SELECTOR button and choose one of the 7 available channels. The LED WIRELESS INDICATOR will light on with a different colour for each channel.

You will find below the channels and their corresponding colour:

Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7
Red	Green	Yellow	Blue	Purple	Cyan	White

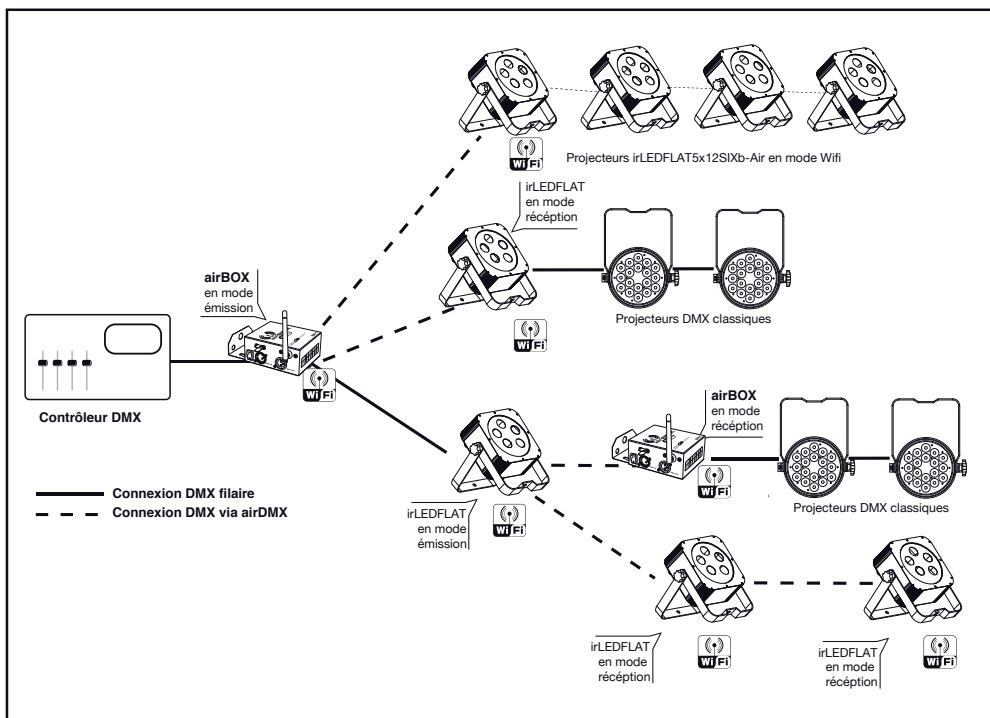
The LED WIRELESS INDICATOR has 3 different status when the units are communicating:

- 1 - LED constantly on : No DMX or WiFi signal.
- 2 - LED flashing in red : The projector is currently transmitting a signal.
- 3 - LED flashing in green : The projector is currently receiving a signal.

Note : The unit transmitting a DMX signal is in transmission mode.

5.2 - Operating principle

The figure below describes an installation combining wireless systems with regular projectors.



Note : The airBOX is transmitter receiver box using the same technology as the irLEDFLAT-Air.

6 - Menus and functions

Access the internal menu by pressing MODE.

To access a submenu, press MODE again.

Press SETUP to configure the selected function.

Simultaneously press MODE and UP if you want the display to stay lit all the time.

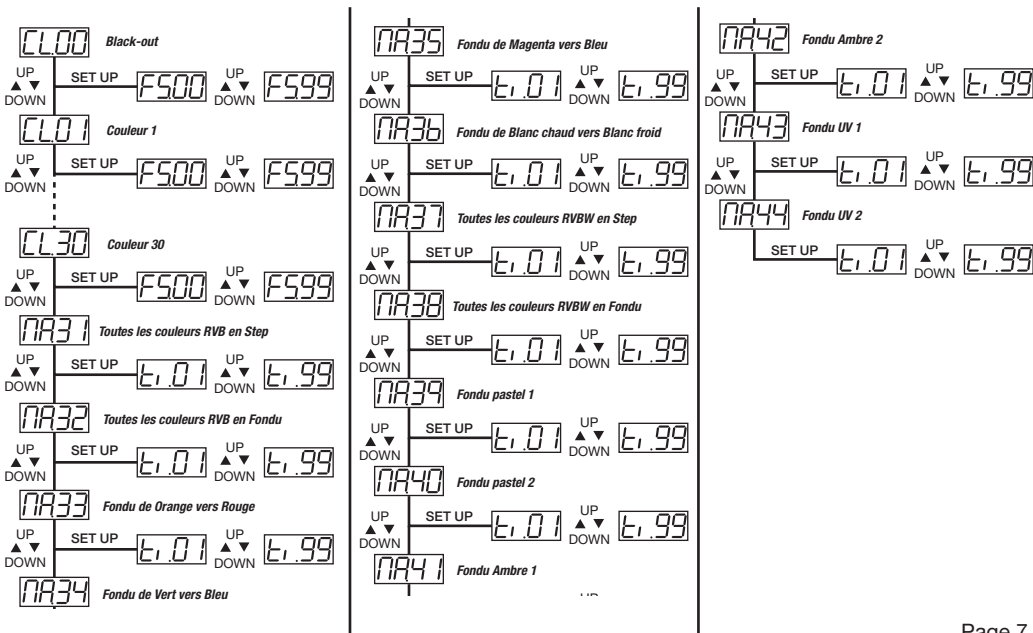
If you want the display to lit off when the menu remains inactive for more than 20 seconds, press simultaneously MODE and DOWN.

The irLEDFLAT SIX projectors feature several DMX modes to be fully compatible with different remote controls and projectors. Use the MODE button to choose a DMX mode. They are listed in the table below.

Mode	SETUP	UP and DOWN	Action
DMX modes			6 channels : RVBWA Dimmers
			7 channels : RVBWAU Dimmers / Main dimmer and strobe
			8 channels : RVBWAU Dimmers / Dimmer / Strobe
			2 channels : Macros and fixed colours / Dimmer, Speed and Sound
			9 channels : RVBWAU Dimmers / Dimmer, Speed and Sound / Strobe
			4 channels : RVB Dimmers / Main dimmer and Strobe
			5 channels : RVBW Dimmers / Main dimmer and Strobe
	Address		DMX addressing
Fixed colours and programs	Colours		Black-out, Colours 1 to 30 and 14 macros
	Strobe		Strobe speed : FS.00 = No strobe ; FS.99 = Full speed
	Speed		Macros speed
General Dimmer			This Dimmer concerns COLOR, MACROS, DIMMERS RVBWAUW and USER modes. This dimmer is deactivated in DMX mode. The default value is 100%
RVBWAU Dimmers			Red: 0 - 100%
			Green: 0 - 100%
			Blue: 0 - 100%
			White: 0 - 100%
			Amber: 0 - 100%
			Ultra-violet: 0 - 100%
			Strobe speed : FS.00 = No strobe ; FS.99 = Full speed
Automatic mode			Vitesse du strobe : FS.00 = Pas de strobe ; FS.99 = Vitesse maximale
Music-sensitive mode			Réglage de la sensibilité micro : SU.00 = sensibilité minimale ; SU.31 = sensibilité maximale
Slave mode			Active le mode esclave

User program	USER	PLAY STOP	Starts the user program
		E.01 E.99	Allows you to set the duration of the user program
		Fd00 Fd99	Configures the fade out time of every step of the program
		F500 F599	Allows you to set the flash rate of every step of the program
		d000 d255	Allows you to configure the max output (dimmer) of every step of the program
User program edition	Ed It	SC01 SC20	Allows you to configure the number of steps of your user program. 20 steps max.
		SE01 SE20	Selects the steps you want to create/modify
		r000 r255	Red level settings for the selected step
		G000 G255	Green level settings for the selected step
		b000 b255	Blue level settings for the selected step
		h000 h255	White level settings for the selected step
		A000 A255	Amber level settings for the selected step
U000 U255	UV level settings for the selected step		
Infrared remote control		rCon rCoF	Activates or deactivates the use of an infrared remote control to control the projector.

More details about the fixed colours and sequences menu



7 - The various DMX modes

7.1 - 6-channel mode = RVBWAUV = CHAB

	DMX values	Effects
CHANNEL 1	000 - 255	Red from 0 - 100%
CHANNEL 2	000 - 255	Green from 0 - 100%
CHANNEL 3	000 - 255	Blue from 0 - 100%
CHANNEL 4	000 - 255	White from 0 - 100%
CHANNEL 5	000 - 255	Amber from 0 - 100%
CHANNEL 6	000 - 255	UV from 0 - 100%

7.2 - 7-channel mode = RVBWAUV / Main dimmer and Strobe = CHB7

	DMX values	Effects
CHANNEL 1	000 - 255	Red from 0 - 100%
CHANNEL 2	000 - 255	Green from 0 - 100%
CHANNEL 3	000 - 255	Blue from 0 - 100%
CHANNEL 4	000 - 255	White from 0 - 100%
CHANNEL 5	000 - 255	Ambre de 0 à 100%
CHANNEL 6	000 - 255	UV from 0 - 100%
CHANNEL 7	000 - 189	Main dimmer from 0 - 100%
	190 - 250	Slow to fast strobe
	251 - 255	Full power

7.3 - 8-channel mode = RVBWAUV / Dimmer / Strobe = CHCB

	DMX values	Effects
CHANNEL 1	000 - 255	Red from 0 - 100%
CHANNEL 2	000 - 255	Green from 0 - 100%
CHANNEL 3	000 - 255	Blue from 0 - 100%
CHANNEL 4	000 - 255	White from 0 - 100%
CHANNEL 5	000 - 255	Ambre de 0 à 100%
CHANNEL 6	000 - 255	UV from 0 - 100%
CHANNEL 7	000 - 255	Main dimmer from 0 - 100%
CHANNEL 8	000 - 255	Slow to fast strobe

7.4 - 2-channel mode : Fixed colours, Macros / Dimmer, Speed and Sound = 

CHANNEL 1		CHANNEL 2			
000 - 005	Off	000 - 255	Dimmer : 0 - 100%		
006 - 010	Red				
011 - 015	Orange				
016 - 020	Yellow				
021 - 025	Green				
026 - 030	Cyan				
031 - 035	Blue				
036 - 040	Pink				
041 - 045	Magenta				
046 - 050	Cold White				
051 - 055	Warm White				
056 - 060	Full White				
061 - 065	Light Pink				
066 - 070	Light Apricot				
071 - 075	Light Ocre				
076 - 080	Green Pearl				
081 - 085	Grey Pearl				
086 - 090	Green Veronese				
091 - 095	Blue Lagon				
096 - 100	Sky Blue				
101 - 105	Light Blue				
106 - 110	Cerulean Blue				
111 - 115	Fluo				
116 - 120	Candy				
121 - 125	Amber				
126 - 130	Sunset				
131 - 135	Ultra violet				
136 - 140	Ultra Green				
141 - 145	Ultra blue				
146 - 150	Ultra Pink				
151 - 155	Ultra Light				
156 - 160	Macro 1			000 - 255	Macros speed 0 to 100%
161 - 165	Macro 2				
166 - 170	Macro 3				
171 - 175	Macro 4				
176 - 180	Macro 5				
181 - 185	Macro 6				
186 - 190	Macro 7				
191 - 195	Macro 8				
196 - 200	Macro 9				
201 - 205	Macro 10				
206 - 210	Macro 11				
211 - 215	Macro 12				
216 - 220	Macro 13				
221 - 225	Macro 14				
226 - 233	Music-sensitive Macro 1 (colour sequencing)	000 - 255	Mic sensitivity		
234 - 241	Music-sensitive Macro 7 (colour sequencing)				
242 - 249	Music-sensitive Macro 11 (colour sequencing)				
250 - 255	Music-sensitive Macro 14 (colour sequencing)				

7.5 - 9-channel mode = RGBWA Dimmers+UV/Fixed colours,Macros/Dimmer,Speed, Sound/Strobe = 

CH 9		CH 8	CH7		CH6	CH5	CH4	CH3	CH2	CH1
000 - 005	Off		if CH 9 > 5	if CH 9 > 5	UV (000 - 255)	Amber (000 - 255)	White (000 - 255)	Blue (000 - 255)	Green (000 - 255)	Red (000 - 255)
006 - 010	Red	000 - 255 : strobe speed	000 - 255 = Dimmer : 0 - 100%	Dimmer : 0 - 100%	No function	No function	No function	No function	No function	No function
011 - 015	Orange									
016 - 020	Yellow									
021 - 025	Green									
026 - 030	Cyan									
031 - 035	Blue									
036 - 040	Pink									
041 - 045	Magenta									
046 - 050	Cold White RGBW									
051 - 055	Warm White RGB									
056 - 060	Full White RGBW									
061 - 065	Light Pink									
066 - 070	Light Apricot									
071 - 075	Light Ocre									
076 - 080	Green Pearl									
081 - 085	Grey Pearl									
086 - 090	Green Veronese									
091 - 095	Blue Lagon									
096 - 100	Sky Blue									
101 - 105	Light Blue									
106 - 110	Cerulean Blue									
111 - 115	Fluo									
116 - 120	Candy									
121 - 125	Amber									
126 - 130	Sunset									
131 - 135	Ultra violet									
136 - 140	Ultra Green									
141 - 145	Ultra blue									
146 - 150	Ultra Pink									
151 - 155	Ultra Light									
156 - 160	Macro 1	000 - 255 = macros speed 0 - 100%								
161 - 165	Macro 2									
166 - 170	Macro 3									
171 - 175	Macro 4									
176 - 180	Macro 5									
181 - 185	Macro 6									
186 - 190	Macro 7									
191 - 195	Macro 8									
196 - 200	Macro 9									
201 - 205	Macro 10									
206 - 210	Macro 11									
211 - 215	Macro 12									
216 - 220	Macro 13									
221 - 225	Macro 14									
226 - 233	Music-sensitive Macro 1	000 - 255 = mic sensibility								
234 - 241	Music-sensitive Macro 2									
242 - 249	Music-sensitive Macro 3									
250 - 255	Music-sensitive Macro 4									

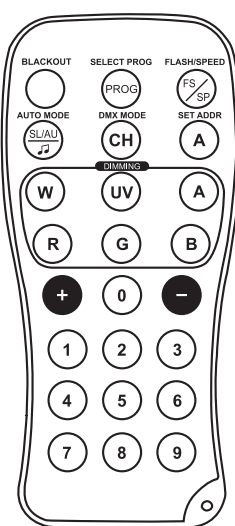
7.6 - 4-channel mode = RGB (pure RGB compatible) = **[CHF4]**

	Values	Effects
CHANNEL 1	000 - 255	Red from 0 - 100%
CHANNEL 2	000 - 255	Green from 0 - 100%
CHANNEL 3	000 - 255	Blue from 0 - 100%
CHANNEL 4	000 - 189	Main dimmer from 0 - 100%
	190 - 250	Slow to fast strobe
	251 - 255	Full power

7.7 - 5-channel mode = RGB + W (Pure RGB compatible, with White on the last channel) = **[CH05]**

	Values	Effects
CHANNEL 1	000 - 255	Red from 0 - 100%
CHANNEL 2	000 - 255	Green from 0 - 100%
CHANNEL 3	000 - 255	Blue from 0 - 100%
CHANNEL 4	000 - 189	Main dimmer from 0 - 100%
	190 - 250	Slow to fast strobe
	251 - 255	Full power
CHANNEL 5	000 - 255	White from 0 - 100%

8 - Infrared remote control

Button	Action	
BlackOut	Projector OFF	
Select Prog	Gives you access to the 30 static colours, and to macros. Use the number keys 0 to 9, then use the + and - keys.	
FLASH / SPEED	<p>The action of this key depends on the mode of the projector :</p> <ul style="list-style-type: none"> - If the projector is using a macro or is in auto mode, this key acts on the speed. Use the + and - keys to configure the speed. - If the projector is in manual mode or uses a static colour, this button acts on the strobe. Use the + and - buttons to configure the strobe speed. 	
SLAVE / AUTO / SOUND	<p>1 - First pressure: Activates the slave mode (The red LEDs are flashing).</p> <p>2 - Second pressure: Activates the autom ode The green LEDs are flashing). The projector starts a 1-14 macro sequence. Use the FLASH/SPEED button and the + and - buttons to configure the speed.</p> <p>3 - Third pressure: Activates the music-sensitive mode (Blue LEDs flashing). Use the + and - buttons to configure the mic sensitivity.</p>	
DMX MODE	Allows you to choose a DMX mode. Use the + and - buttons to switch from one mode to another.	
SET ADDR	<p>Allows you to configure the DMX address of the projector. For instance, to configure the address 245 :</p> <ul style="list-style-type: none"> - Press SET ADDR, all the LEDs are flashing to indicate the process beginning. - Press 2, the green LEDs of your projectors lit up to indicate the hundreds digit has been saved. - Press 4, the blue LEDs of your projector lit up to indicate the tenths digit has been saved. - Then press 5. All the LEDs will flash to confirm you the address has been saved properly. 	
RGBWAU	These buttons allow you to manually configure the value of each colour. Select a colour with one of these buttons, then press the + and - buttons to change their level.	
NOTE : The display will indicate the projector status for each action via the remote control.		

When changing of DMX mode via the DMX MODE button or with the projectors menu buttons, the LEDs will lit in a different colour for each DMX mode.

The following table indicates the relations between colours and DMX modes.

Allumage des LEDs	Mode DMX
Rouges	[ChRB] 6 canaux
Vertes	[Chb7] 7 canaux
Bleues	[ChC2] 2 canaux
Blanches	[Chd9] 9 canaux
Rouges et Bleues	[ChE4] 4 canaux
Rouges et Ambres	[ChFS] 5 canaux

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