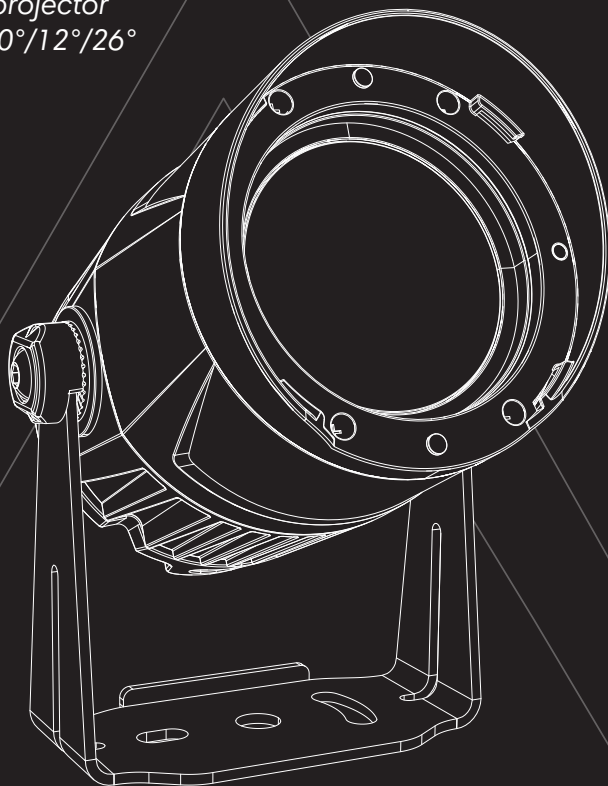# ∇PAR-40RGBL

Projecteur architectural IP66
1 LED RGBL 40 W 10°/12°/26°

IP66 architectural projector
1 LED RGBL 40 W 10°/12°/26°

Contest ◬
ARCHITECTURAL LIGHTING

VERSATILE COLOR

USER GUIDE

1 - Safety information

Important safety information

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

IMPORTANT This symbol signals an important safety precaution.

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

CAUTION The CAUTION symbol signals a risk of product deterioration.

Symbols used on the projector

DMX RDM The DMX - RDM symbol indicates that the projector is configurable and controllable in DMX via the RDM (Remote Data Management) protocol.

IP66 IK07 The IP66 - IK07 symbols indicate the protection levels of the device: **IP66**: Totally protected against dust and protected against strong jets of water from all directions. **IK07**: Protected against an impact energy of 2 Joules.

1m The 1m symbol indicates the minimum distance to be observed between the projector and the illuminated surface.

+45°C -20°C The -20° / +45° symbol indicates the extreme ambient temperature range in which the projector can operate.

This symbol indicates a risk of burns in the event of contact with the projector in operation. (passive heat dissipation via projector body).

FR Cet appareil et ses cordons se recyclent

À DÉPOSER EN MAGASIN   À DÉPOSER EN DÉCHÈTERIE   OU

Points de collecte sur www.quefairedemesdechets.fr
Privilégiez la réparation ou le don de votre appareil !

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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.

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 - Installation :
Installation must be performed by qualified personnel and with certified equipment only. Do not place this appliance on an unstable support, the appliance could fall, seriously injuring a child or an adult and being seriously damaged. Make sure the mounting bracket can hold 10 times the weight of the device. Always use a double hook with a standard safety cable. Have the installation inspected by an expert before commissioning.

6 - Ceiling or wall installation :
Please contact your local dealer before attempting any ceiling or wall installation.

7 - Heat exposure :
It is advisable to keep the product away from sources of heat and flammable materials and liquids. Do not cover the ventilation openings, this could lead to overheating. The appliance cools by natural convection, its surface can be very hot and cause burns. Allow to cool before handling.

8 - 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.

9 - 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.

10 - 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.

11 - 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.

12 - Inspection/maintenance :
Please do not attempt any inspection or maintenance by yourself. Refer all servicing to qualified personnel.

13 - Operating environment :
Ambient temperature: -20 to +45°C.
Do not operate this product in a non-ventilated, or warm place.

CAUTION
This device is equipped with class 2 LEDs. Avoid staring directly into the beam as serious eye damage is possible.

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.

2 - Features

VPAR-40RGBL :
›LED : 1 x LED 40W 4 in 1 Red Green Blue Lime
›Luminosity : 278 Lm - 320 Lux at 5 m
›Symmetrical lenses with 10° aperture
›Diffuser filters included for 12° and 26° openings
›Power consumption: 42 W
›Dimensions: 177 x 144 x 174 mm
›Weight: 2 kg

Connections
›DMX/Power connections via hybrid IN and OUT cables with IP67 plugs

Features
› Control by external box VRDM-Control for setting by RDM. Compatible with RDM consoles on certain settings.
› DMX control protocol on 2 to 8 channels depending on the selected mode
› Power supply : 110-240 V / 50-60 Hz
› Selectable refresh rate from 900 Hz to 3600 Hz.
› Cooling: By convection
› Finish : Cast aluminum epoxy painted white gray RAL9002
› Degree of Protection IP66: Resistant to dust and water splashes in all directions.
› Shock resistance IK06: Protected against a mechanical shock of 2 joules, i.e. a 500g object falling 40cm.
› Sealed diaphragm depressurization Valve

Package contents :
The packaging should contain the following:
›The projector
›The user guide
›Two 12° and 26° diffuser filters
›1m stripped wire cord and IN hybrid plug
›Projector OUT cable outlet plug

3 - Product description
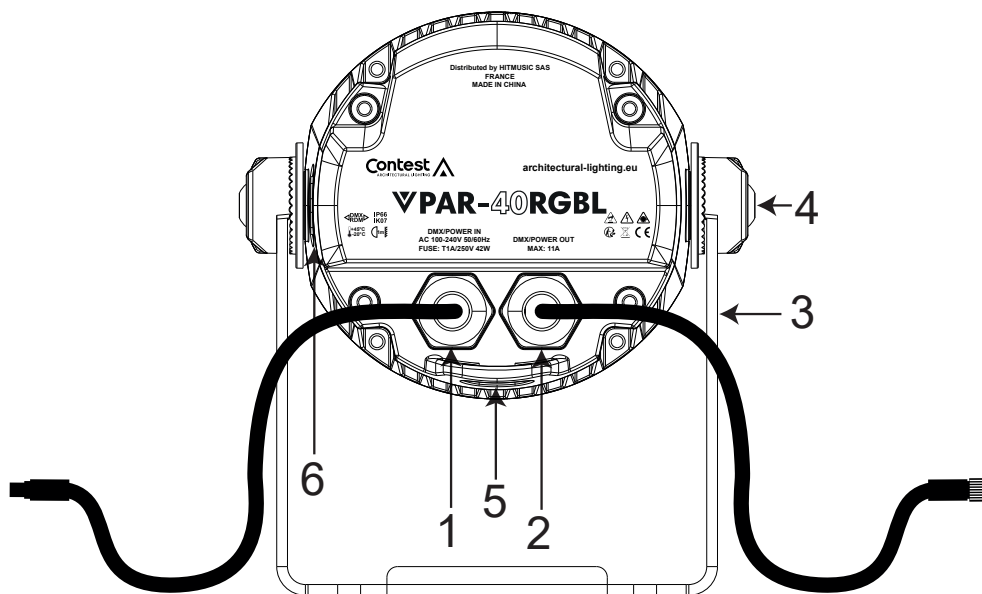
1 **Power supply input + DMX**
Allows the projector to be connected to the mains via a 40 cm hybrid cord (power supply + DMX) with molded plug.

<div>

⚠ **CAUTION !**
CAUTION
This appliance must be connected by a qualified technician in accordance with the regulations in force. This device is class 1 and must be earthed.

</div>

Power supply :
Make sure that the voltage of the place of service corresponds to the instructions noted on the product.

2 **Power supply output + DMX**
Connects a projector output via the 40 cm hybrid cord (power + DMX) with molded plug. Please respect the output power limits of the projector see chapter 6. If no projector is connected at the output please use the plug provided.

3 **Suspension Bracket**
Allows you to hang or place on the ground and to direct the projector.

4 **Suspension bracket clamping system**
Allows you to adjust the tilt and lock the position of the projector.

5 **Safety ring**
Connect a double safety sling to this ring.

<div>

⚠ **CAUTION !**
CAUTION
Make sure the attachment point is properly tightened.
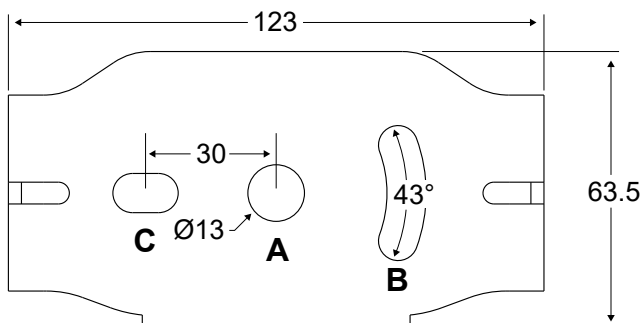It is mandatory to install a safety sling.
When installing in a public place, legislation requires each device to have a double safety hook. This security system must support 10 times the weight of the device so you must provide a sling capable of supporting at least 20 kg minimum.

</div>

6 **Decompression valve**
This valve automatically balances the pressure in the projector and thus eliminates the risk of water infiltration by suction. Please do not obstruct this valve.

## 4 - Attaching the bracket and aiming the projector

The projector can be fixed on a suitable flat surface using three attachment points **A** and **B**. The notch **B** is used to lock the rotation of the projector in Pan over 43°. Temporary hanging is possible using one clamps fixed through the external holes **A**.

CAUTION !
Ensure that the anchor points are properly tightened. Use 12mm stainless screws and check the solidity of the support. It is mandatory to install a safety sling. When installing in a public place, legislation requires each device to have a double safety hook. This security system must support 10 times the weight of the device so you must provide a sling capable of supporting at least 20 kg minimum.

To choose the tilt angle of your projector: loosen the central screw using a 6mm Allen key and rotate the projector. The notched clamping part allows the projector to be positioned permanently and the marking of the angles provides information on the direction of the beam (see figure opposite).
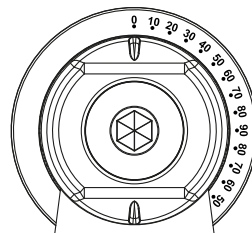
5 - Installation of diffusion filters
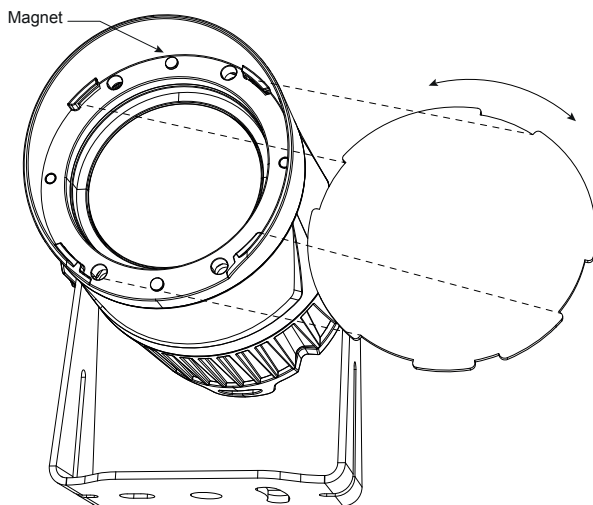
Two diffuser filters are supplied with the fixture: 12° and 26°.
They are attached to the 4 notches on the front of the fixture by turning them a quarter turn to lock the filter in place.
The magnet secures the filter in position.
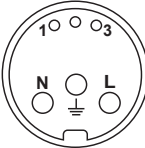
6 - Connection and wiring

6.1 - IP67 plugs :

CAUTION !
The projector is fitted with molded IP67 hybrid plugs.
These plugs guarantee a good seal of the product. Cutting the plugs will void the projector warranty if water ingress occurs.
The projector is delivered with a bare wire adapter to IP67 IN connector in order to connect to an IP junction box.

CAUTION !
Risk of electic choks
Do not plug or unplug any cables while the system is powered on.

The plugs are equipped with three pins for the power supply and three pins for the DMX signal. The hybrid cable is used for the power supply part in 3 x 1.5 mm² and for the isolated DMX part in a separate sheath. The color code of the corresponding wires is shown in the diagram opposite.

CAUTION !
The plugs mounted on the projector cables are IP67, so they are waterproof but it is not recommended to leave them in standing water.

Power : Alimentation	Wire color : Code couleur	DMX	Wire color : Code couleur
L : Live : Phase	Brown : Marron	**1** : Masse	Black : Noir
N : Neutral : Neutre	Blue : Bleu	**2**: Data -	White : Blanc
Ground : Terre	Yellow/green : Jaune/vert	**3** : Data +	Red : Rouge

Water may be sucked into the interior of the projector due to vacuum caused by temperature changes in the projector. Ensure that the projector is protected against water ingress through the cables by using connectors or junction boxes that meet at least IP66. Create a drip loop before the cable glands or connection points to prevent them from being constantly immersed in water as shown in the figure below.
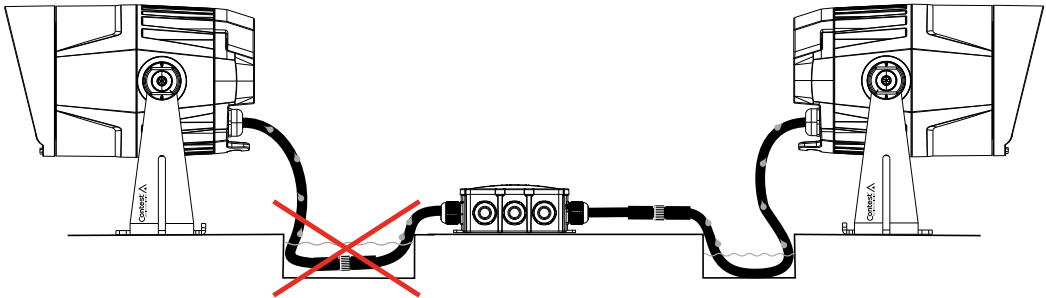
6.2 - Indoor line cabling and product setting adjustments with VC-ADAPT:

Use the VC-ADAPT adapter cable to power your line of indoor projectors or make settings adjustments. This is a 2P+T power plug adapter for power and an XLR plug for DMX. Output is via a hybrid Power + DMX plug.
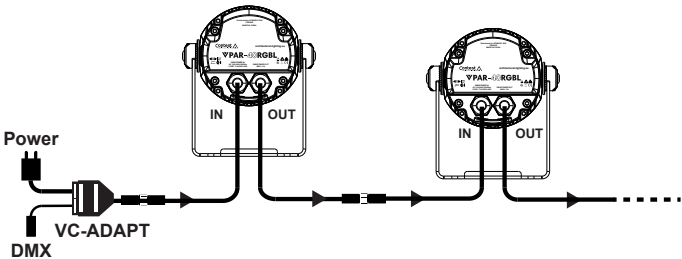
6.3 - Outdoor line wiring with junction box and VC-YHYB adapter :

For outdoor connections that must remain sealed, you can use a junction box and a hybrid Y adapter to distribute the power and the DMX as shown in the figure below.

**Power
16A (3500W maxi)**

DMX

IN   OUT   IN

IN

OUT

IN   OUT

IN   OUT

VC-YHYB

**1x IpBox-p4 box
2x VC-Start1/3 cord
1x FastCon-1333POW
1x FastCon-1333DMX**

CAUTION !
The sum of the powers of the different lines must not exceed the power of the Power input (3500 W)
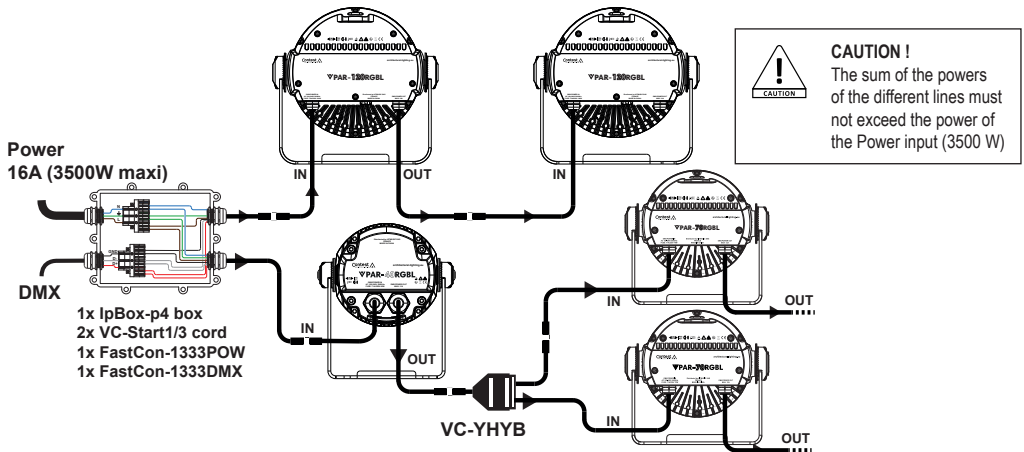
6.4 - Projector chains :

Wiring a group of projectors is simple.
Projectors can be connected to each other directly between the projectors' IP IN/OUT cords for close-range use.
VC-JUMP cords can also be used to increase the distance between two projectors.

IN   OUT   IN   OUT   IN   OUT
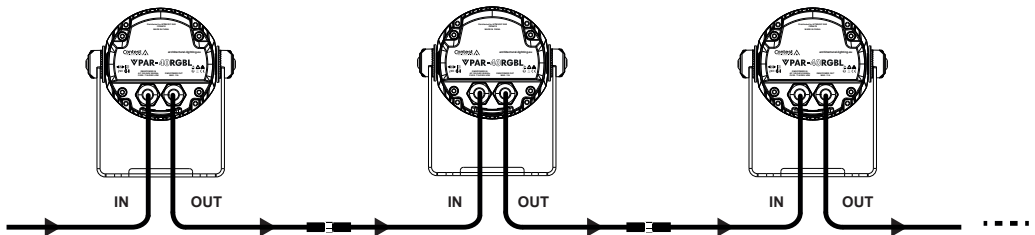
VC-JUMP hybrid cords for linking projectors are available in lengths from 1m to 10m.

CAUTION !
The sum of the power ratings of the different lines must not exceed the power rating of the Power input (3500 W).
The power rating per line is limited to the specifications of each of the devices, see table in the following paragraph.

6.5 - Line lenght :

The maximum number of spotlights on a single line depends on the length of the line and the cross-section of the power cable.
A "line" is defined as the length from the feed point of the first fixture to the last.
Versatile Versatile projectors can be mixed on the same line.
See the table below for the number of Max spotlights according to line length.

PROJECTOR	Qty on 10 m	Qty on 20 m	Qty on 30 m	Qty on 50 m	Qty on 100 m
VCOB-60DW	31	30	20	11	5
VCOB-120DW	14	14	10	6	2
VBAR-50DW	32	32	23	13	6
VBAR-100DW	19	19	12	7	3
VPAR-40DW	32	32	30	18	8
VPAR-70DW	27	26	17	10	4
VPAR-120DW	16	16	10	6	2
VPAR-150DW	11	11	8	5	2
VCOB-60RGBL	31	30	20	11	5
VCOB-150RGBL	12	12	8	5	2
VBAR-50RGBL	32	32	23	13	6
VBAR-100RGBL	19	19	12	7	3
VPAR-40RGBL	32	32	30	18	8
VPAR-70RGBL	27	26	17	10	4
VPAR-120RGBL	16	16	10	6	2
VPAR-150RGBL	11	11	8	5	2
VPANEL-200RGBL	9	9	6	3	1
VH2O-90	22	21	13	7	3
Avaible power on each line	2300 W	2216 W	1477 W	886 W	443 W

6.6 - Line length examples

The examples given below are calculated for the VCOB-60 projector. To perform calculations for other projectors, refer to paragraph 6.5.

Limitation of 31 VCOB-60 projectors on a cable length of 10 m
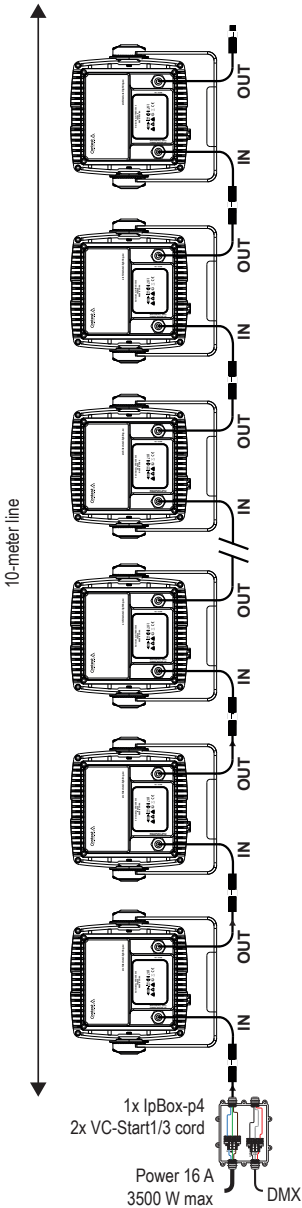
Limitation of 11 VCOB-60 projectors on a cable length of 50 m

10-meter line

50-meter line

OUT
IN
OUT
IN
OUT
IN
OUT
IN
OUT
IN
OUT
IN

OUT
IN
OUT
IN
OUT
IN
OUT
IN

1x IpBox-p4
2x VC-Start1/3 cord

Power 16 A
3500 W max

DMX

1x IpBox-p4
2x VC-Start1/3 cord

Power 16 A
3500 W max

DMX
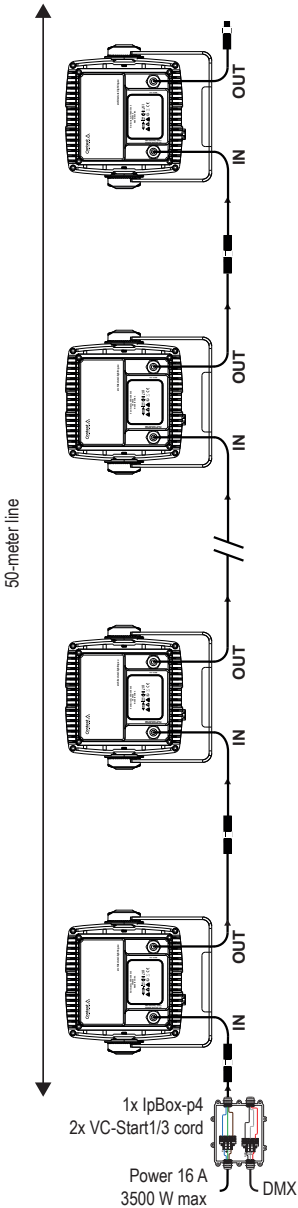
If you need more spotlights, you can use line boosters.

Example with the DMX Splitter/VRDM-Split Booster box. This box is equipped with a 16 A power input that allows power to be fed back into the additional line.
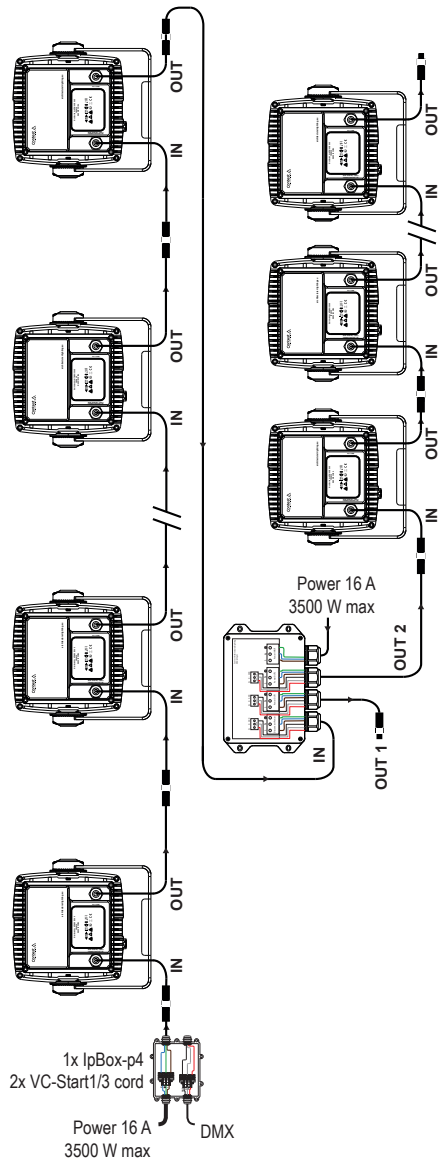
Example with the IpBox-p6 box. This box is equipped with a 16 A power input that allows power to be fed back into the additional line.

OUT

IN

OUT

IN

OUT

IN

OUT

IN

OUT

IN

OUT

IN

OUT

IN

Power 16 A
3500 W max

OUT 2

OUT 1

IN

1x IpBox-p4
2x VC-Start1/3 cord

Power 16 A
3500 W max

DMX

OUT

IN

OUT

IN

OUT

IN

OUT

IN

OUT

IN

OUT

IN

OUT

IN

1x boîte IpBox-p6
1x cordon VC-End/3
3x cordons VC-Start1/3
1x FastCon-1333POW
1x FastCon-1333DMX

Power 16 A
3500 W max

1x IpBox-p4
2x VC-Start1/3 cord

Power 16 A
3500 W max

DMX

6.7 - Use with VRDM-Split Splitter - H11546
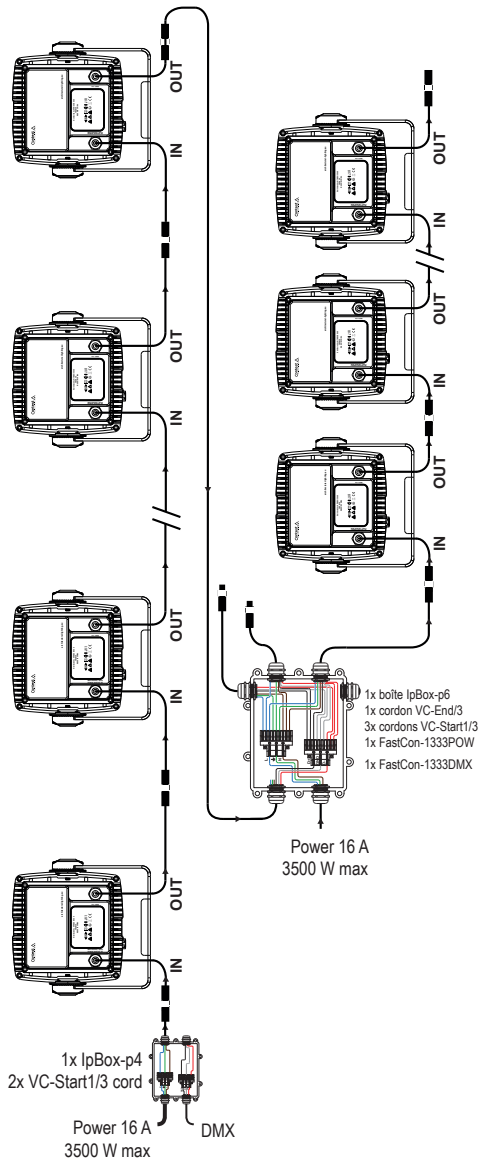
The VRDM-Split is a DMX RDM 1xIN 2x OUT IP66 splitter. It reboosts the incoming DMX signal on two RDM-compatible DMX outputs. It has a Hybrid Power/DMX input on which the DMX signal will be extracted in order to be divided into two separate isolated and protected lines.
The Hybrid input supply will be disconnected and a new Power IN supply will be injected on the two Hybrid outputs.

CAUTION !
The sum of the powers of the different lines must not exceed the power of the Power input (3500 W). The power per line is limited to the characteristics of each of the devices, see table in the section on chaining of projectors.

The Hybrid Power+DMX IN input on the left is used to recover the DMX signal which will be filtered, divided and protected.
The power supply will be disconnected from the circuit via the Disconnect Power connector.
The Power IN input on the right is used to supply the splitter and to re-inject the supply into the outputs.
Outputs OUT1 and OUT2 therefore have a reboosted DMX signal and power supply to start new lines.
Note :
In this case, the VRDM-Split is used in a Hybrid 1 x IN, 2 x OUT configuration.

It is possible to use the VRDM-Split simply by entering with a DMX IN signal to 2 x DMX OUT and supplying the box with power IN only.
It is also possible to mix the two combinations for more flexibility.

6.8 - Power supply booster :

To overcome the lack of power of the line or the voltage drop due to a long cable length, it is necessary to be able to boost the power supply. To do this, you will need to use a junction box and separate the DMX coming out of the hybrid cable at the end of the line and isolate the power supply. A new mains power supply can then be injected into one or more chains of projectors on hybrid connectors at the outlet of the box as shown in the figure below.
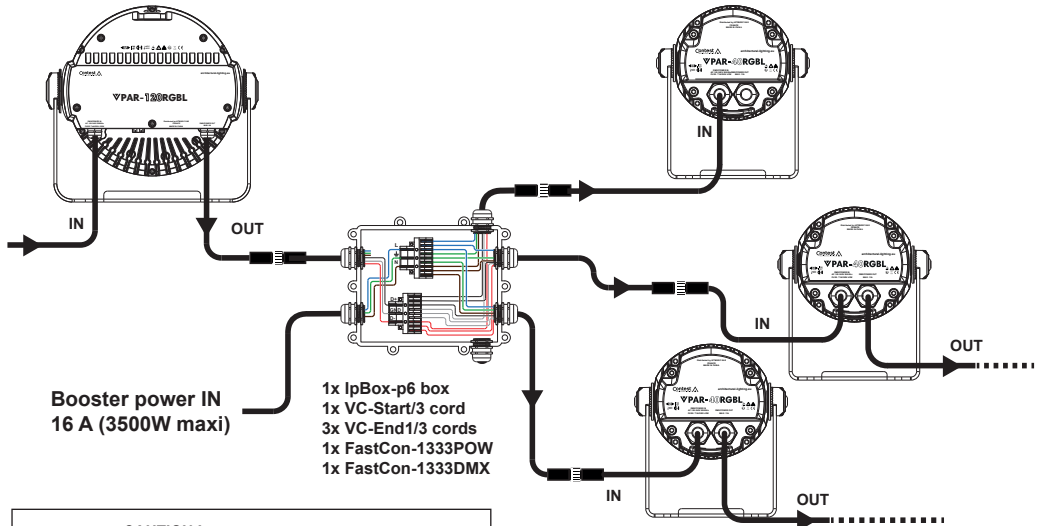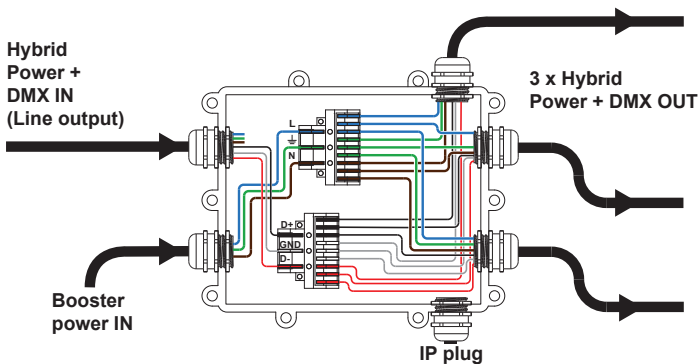

**Booster power IN
16 A (3500W maxi)**

**1x IpBox-p6 box
1x VC-Start/3 cord
3x VC-End1/3 cords
1x FastCon-1333POW
1x FastCon-1333DMX**

CAUTION !
The sum of the powers of the different lines must not exceed the power of the Power input (3500 W). The power per line is limited to the characteristics of each of the devices, see table in the section on chaining of projectors.

**Hybrid
Power +
DMX IN
(Line output)**

**3 x Hybrid
Power + DMX OUT**

**Booster
power IN**

IP plug

**CAUTION !
Outgoing power supply
OUT to be isolated from the
Booster power supply IN**

7 - Setting

7.1 - Different operating modes:

The projectors can be used in **DMX** and **Stand-Alone** mode.

> 1 - Using the projectors in **DMX** mode is extremely simple; you just need to choose the right address and the right DMX mode.
> 2 - Using the projectors in **Stand-alone** mode.

There are several ways to use one or more projectors in Stand-alone mode:

- **Master/Slave network**
The main projector should be configured as "Master" in "Slave mode" and the others as "Slave" (default value).
It will then be sufficient to make the beam adjustments in "Stand-Alone Mode" (Dimmer/Flash/Custom Color/Presets/UserMacro).
To validate all the parameters, press the "Mode" button until you return to the VRDM-Control "Menu".
The "Slave" projectors will then synchronize with the "Master" projector.

- **Use of projectors in stand-alone mode "single"**
Using the projectors in "Single" mode allows each of the projectors to be set with different colors even if these projectors are in a Master Slave network.
Each of the individual projectors must be configured in "Single" in "Slave mode".
It will then be sufficient to make the beam adjustments in "Stand-Alone Mode" (Dimmer/Flash/Custom Color/Presets/UserMacro).
To confirm all the settings, press the "Mode" button until you return to the VRDM-Control "Menu".
The "Single" projectors will then light up according to the settings of each one.

If a DMX signal is received by stand-alone projectors, the DMX will take priority.
When the DMX signal is lost, the projectors will switch back to stand-alone.

7.2 - Macro creation

It is possible to create programs with color changes.
The projector must be in "Master" or "Single" mode, see previous paragraph.

To do this, go into "Edit User Macro" mode and make the various settings.
"Play Time" Duration of steps
"Play Fade" Fade time between steps (0 for no fade).
"Edit Step NB" Number of steps in the sequence.
"Edit Steps" allows you to set the parameters for each step in the sequence.

Once the Macro has been created, go to "Stand-Alone Mode", "User macro" and select "Yes".
To validate all the parameters, press the "Mode" button until you return to the VRDM-Control "Menu".
The "Master/Slave" and/or "Singles" projectors will then light up according to the settings of each one.

7.3 - "Copy proj settings" mode

This mode allows you to copy some or all of the settings of a projector to the projectors connected to the same line.
Simply configure the projector and go to "Setting mode" "Copy proj settings" and select the settings to be copied.
To confirm the copying of the elements, press the 'Mode' button until you return to the VRDM-Control "Menu".

7.4 - VRDM-CONTROL menu

MENU				
RDM	**Products List**	**Label:**	**"Product Name"**	The name of the product connected to the box
		Model:	**"Product Name"**	The name of the product connected to the box
		Manufacturer:	**Hitmusic SAS**	The name of the manufacturer
		Firmware:	**V1.00**	Firmware version
		DMX Address:	**001 (XXX)**	DMX address 001 start (XXX) end
		DMX Personality:	**CH list**	Number of used channels
		DMX Slots:		
		Identify:	**ON (By default) / OFF**	Allows you to flash the selected projector in order to identify it among the other projectors
		Temperature:	**…**	Internal temperature of the projector
	Fixture Menu	**NO DMX**	**Blackout**	
			Freeze (By default)	
			Stand-Alone	
		Slave mode	**Single**	
			Master	
			Slave (By default)	
		Stand-Alone Mode	**Master Dimmer**	**Values from 000 to 255**
			Flash	**Values from 000 to 255**
			Custom color	**Red**
				Green
				Blue
				Lime
			Macro	**Presets/Macro**
				Fade Speed
			USER macro	**YES / NO**
		Edit USER Macro	**Play Time**	**Time 00-99**
			Play Fade	**Fade 00-99**
			Edit Step NB	**Step NB 01-20**
			Edit Steps	**Edit Step 1 to 20**
				Dimmer
				Flash
				Red
				Green
				Blue
				Lime
		Setting Mode	**Dimmer curves**	**Linear**
				Exponential (By default)
				Logarithmic
				S-Curve
			White Balance	**Red**
				Green
				Blue
				Lime
			PWM Frequency	**900Hz**
				1200Hz (By default)
				2400Hz
				3600Hz
			Temperature	**°C (By default) / °F**
			Time info	**…**
			Copy proj settings	**DMX ADDRESS**
				DMX personality
				NO DMX
				Slave Mode
				Stand Alone Mode
				Edit User macro
				Dimmer Curve
				White Balance
				PWM Frequency
				All Parameters
			DFSET	**OFF**
				ON

VPAR-40RGBL projector is configured using the remote RDM control box VRDM-CONTROL. This box makes it possible to deport the control part of the projector in order to make all the adjustments (settings) of the projector via the DMX cord by RDM protocol.

The menu is different depending on the type of projector, the functions are as follows:
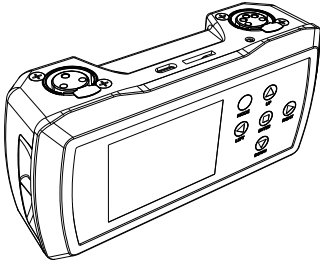
|		
	In case of loss of DMX signal either Blackout mode or stays on the last value or launches the Stand-Alone program	
	Allows to have an autonomous color per projector	
	Master Projector controls the Slaves	
	Projector controlled by the Master	
	Dimming from 0 to 100%	
	Vitesse des flash de lent vers rapide	
	Values from 000 to 255	Red gradation from 0 to 100%.
	Values from 000 to 255	Green gradation from 0 to 100%.
	Values from 000 to 255	Blue gradation from 0 to 100%.
	Values from 000 to 255	Lime gradation from 0 to 100%.
	Show all Presets list	Allows to choose the presets or macro to launch
	Speed from 0% to 100%	Crossfade time from slow to fast
	Launches the macro you've recorded	
	Sets user program duration	
	Determines the fade time between each user program step.	
	Sets the number of user program steps	
	Stores user program step number	
	Dimmer gradation from 0 to 100%	
	Flash gradation from 0 to 100%	
	Red gradation from 0 to 100%	
	Green gradation from 0 to 100%	
	Blue gradation from 0 to 100%	
	Lime gradation from 0 to 100%	
	Allows you to choose the type of dimmer curve. See details in 7.3 paragraph	
	Values from 000 to 255	
	Values from 000 to 255	Adjusts white balance by varying color tones
	Values from 000 to 255	
	Values from 000 to 255	
	Allows you to choose the LED oscillation frequency to avoid Flicker effects in video. The higher the frequency, the better the refresh rate, but the brightness may be degraded.	
	Choosing the type of display for the internal temperature of the projector	
	Displays the elapsed time in hours since the first power on	
	NO / YES	
	NO / YES	
	NO / YES	
	NO / YES	
	NO / YES	
	NO / YES	
	NO / YES	
	NO / YES	
	NO / YES	
	NO / YES	
	ON /OFF	Enables return to default projector settings
	ON /OFF	Allows you to return to the default values for all the projectors on the line

7.5 - Detail of the 4 DimCurve modes

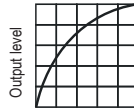DimCurv modes allow you to define the behavior of the dimmer.
Below 4 diagrams show you the evolution of the output level according to the chosen mode and the DMX level of the dimmer channel.
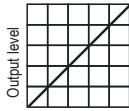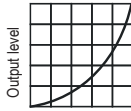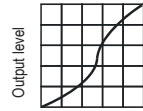

Mode 1 : Linear   Mode 2 : Exponential   Mode 3 : Logarithmic   Mode 4 : S-curve

8 - The different DMX modes

As soon as a DMX signal is present on the DMX IN input, the projector automatically switches to DMX mode.

8.1 - 2 channel mode

Channel	Values	Action
	Colors and macros	
	000-013	Red
	014-020	Orange
	021-027	Yellow
	028-034	Lemon yellow
	035-041	Green
	042-048	Cyan
	049-055	Light blue
	056-062	Blue
	063-069	Purple
	070-076	Magenta
	077-083	Pink
	084-090	Light red
	091-097	Orange pastel
	098-104	Light yellow
	105-111	Light lemon yellow
1	112-118	Light green
	119-125	Light blue
	126-132	Light purple
	133-139	Light magenta
	140-146	Light pink
	147-153	Salmon
	154-160	CCT 2700K
	161-167	CCT 3000K
	168-174	CCT 4000K
	175-181	CCT 6200K
	182-188	MACRO : From red to blue to red
	189-195	MACRO : From blue to green to blue
	196-202	MACRO : From green to blue to green
	203-209	MACRO : From light green to light blue
	210-216	MACRO : From orange to red to orange
	217-223	MACRO : From red to pink to orange
	224-230	MACRO : From pink to blue to pink
	231-255	MACRO : Cross-fading colors
	Dimmer or speed	
2	000 - 255	Dimmer from 0 to 100% if channel 1 is between 000 and 181
	000 - 255	Increasing speed if channel 1 is between 182 and 255

8.2 - 4 Channel mode

Channel	Values		Action
1	**Red**		
		000 - 255	000 : 0% - 255 : 100%
2	**Green**		
		000 - 255	000 : 0% - 255 : 100%
3	**Blue**		
		000 - 255	000 : 0% - 255 : 100%
4	**Lime**		
		000 - 255	000 : 0% - 255 : 100%

8.3 - 5 Channel mode

Channel	Values		Action
1	**Red**		
		000 - 255	000 : 0% - 255 : 100%
2	**Green**		
		000 - 255	000 : 0% - 255 : 100%
3	**blue**		
		000 - 255	000 : 0% - 255 : 100%
4	**Lime**		
		000 - 255	000 : 0% - 255 : 100%
5	**Dimmer**		
		000 - 255	Variable light intensity from 0 to 100%

8.4 - 6 Channel mode

Channel	Values		Action
1	**Red**		
		000 - 255	000 : 0% - 255 : 100%
2	**Green**		
		000 - 255	000 : 0% - 255 : 100%
3	**Blue**		
		000 - 255	000 : 0% - 255 : 100%
4	**Lime**		
		000 - 255	000 : black out - 255 : 100%
5	**Dimmer**		
		000 - 255	Variable light intensity from 0 to 100%
6	**Shutter**		
		000 - 031	LED off
		032 - 063	LED on
		064 - 095	Strobe effect with increasing speed
		096 - 127	LED on
		128 - 159	Pulse effect chaining
		160 - 191	LED allumée
		192 - 223	Random strobe effect with increasing speed
		224 - 255	LED on

8.5 - 8 Channel mode

Channel	Values	Action
1	**Red**	
	000 - 255	000 : 0% - 255 : 100%
2	**Green**	
	000 - 255	000 : 0% - 255 : 100%
3	**Blue**	
	000 - 255	000 : 0% - 255 : 100%
4	**Lime**	
	000 - 255	000 : 0% - 255 : 100%
5	**Dimmer**	
	000 - 255	Variable light intensity from 0 to 100%
6	**Shutter**	
	000 - 031	LED off
	032 - 063	LED on
	064 - 095	Strobe effect with increasing speed
	096 - 127	LED on
	128 - 159	Pulse effect chaining
	160 - 191	LED allumée
	192 - 223	Random strobe effect with increasing speed
	224 - 255	LED on
7	**Colors and macros**	
	000-006	No function
	000-013	Red
	014-020	Orange
	021-027	Yellow
	028-034	Lemon yellow
	035-041	Green
	042-048	Cyan
	049-055	Light blue
	056-062	Blue
	063-069	Purple
	070-076	Magenta
	077-083	Pink
	084-090	Light red
	091-097	Orange pastel
	098-104	Light yellow
	105-111	Light lemon yellow
	112-118	Light green
	119-125	Light blue
	126-132	Light purple
	133-139	Light magenta
	140-146	Light pink
	147-153	Salmon
	154-160	CCT 2700K
	161-167	CCT 3000K
	168-174	CCT 4000K
	175-181	CCT 6200K
	182-188	MACRO : From red to blue to red
	189-195	MACRO : From blue to green to blue
	196-202	MACRO : From green to blue to green
	203-209	MACRO : From light green to light blue
	210-216	MACRO : From orange to red to orange
	217-223	MACRO : From red to pink to orange
	224-230	MACRO : From pink to blue to pink
	231-255	MACRO : Cross-fading colors
8	**Macrospeed**	
	000 - 255	Increasing speed

9 - Dimensions

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