

# ACCU MINI-PAR 12TC MK2

## MINI-PAR 12TC MK2

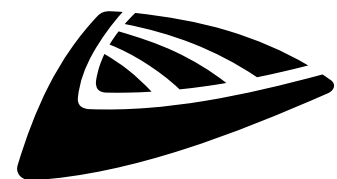
## MINI-PAR COB MK2



# ENGLISH

## Operation Manual

Other languages can be downloaded from:  
[WWW.JB-SYSTEMS.EU](http://WWW.JB-SYSTEMS.EU)



*Version: 1.0*

**JB SYSTEMS**

# OPERATION MANUAL

Thank you for buying this JB Systems® product. To take full advantage of all possibilities and for your own safety, please read these operating instructions very carefully before you start using this unit.

## FEATURES

- Ultra-compact RGB LED projector.
  - 12TC version with 12 high power led's and a beam of 17°
  - COB version with a powerful single beam of 38°
- The ACCU MINI-PAR 12TC is equipped with a rechargeable Lithium battery !  
Battery run time @ full power / single color (red, green or blue) = 7 hours  
Battery run time @ full power / color fade = > 5 hours  
Charging time: 3-4 hours
- Use the unit in any way you like it !
  - Standalone: sound activated (internal mic) or automatic shows.
  - Can be controlled with the optional IR REMOTE controller (order code B05545)
  - Master/slave function for wonderful synchronized shows when several units are used.
  - DMX-control: via 3, 4 or 5 Channels.
- Prepared for wireless DMX: just plug-in an optional WTR-DMX DONGLE ! (Briteq® code: B04645)
- 4-digit LED display for easy menu navigation
- Compatible with the LEDCON-02 Mk2 and LEDCON-XL controllers
- Double hanging bracket that can be used as a floor stand

## BEFORE USE

- Before you start using this unit, please check if there's no transportation damage. Should there be any, do not use the device and consult your dealer first.
- **Important:** This device left our factory in perfect condition and well packaged. It is absolutely necessary for the user to strictly follow the safety instructions and warnings in this user manual. Any damage caused by mishandling is not subject to warranty. The dealer will not accept responsibility for any resulting defects or problems caused by disregarding this user manual.
- Keep this booklet in a safe place for future consultation. If you sell the fixture, be sure to add this user manual.

### Check the contents:

Check that the cardboard box contains the following items:

- MINI-PAR unit
- Power Supply + USB-C cable (only for the ACCU MINI-PAR 12TC)
- Operating instructions

## SAFETY INSTRUCTIONS:



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



**CAUTION:** To reduce the risk of electric shock, do not remove the top cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user or the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.



This symbol means: indoor use only.



This symbol means: Read instructions.

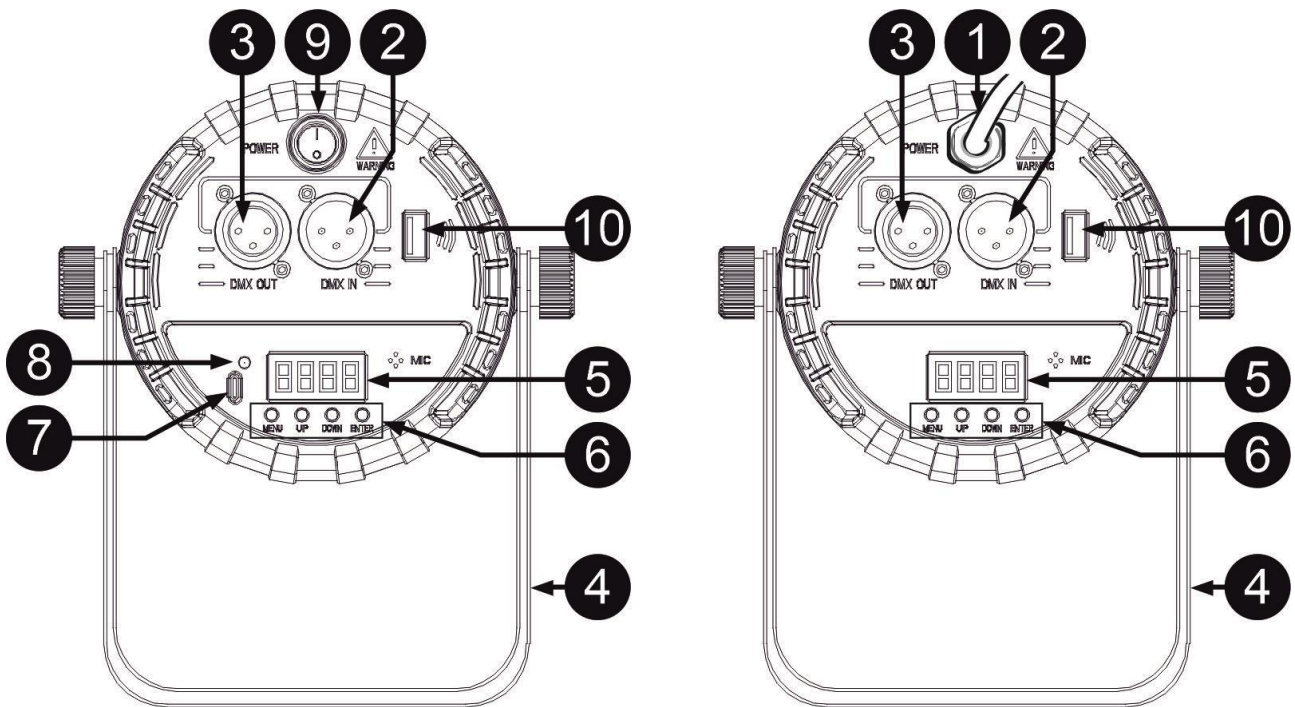


This symbol determines: the minimum distance from lighted objects. The minimum distance between light-output and the illuminated surface must be more than 1 meter.

- To protect the environment, please try to recycle the packing material as much as possible.
- A new light effect sometimes causes some unwanted smoke and/or smell. This is normal and disappears after some minutes.
- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- To avoid condensation to be formed inside, allow the unit to adapt to the surrounding temperatures when bringing it into a warm room after transport. Condense sometimes prevents the unit from working at full performance or may even cause damages.
- This unit is for indoor use only.
- Don't place metal objects or spill liquid inside the unit. Electric shock or malfunction may result. If a foreign object enters the unit, immediately disconnect the mains power.
- Locate the fixture in a well ventilated spot, away from any flammable materials and/or liquids. The fixture must be fixed at least 50cm from surrounding walls.
- Don't cover any ventilation openings as this may result in overheating.
- Prevent use in dusty environments and clean the unit regularly.
- Keep the unit away from children.
- Inexperienced persons should not operate this device.
- The save ambient temperature is between 15° & 40°C. Don't use this unit at higher ambient temperatures.
- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- Always unplug the unit when it is not used for a longer time or before replacing the bulb or start servicing.
- The electrical installation should be carried out by qualified personal only, according to the regulations for electrical and mechanical safety in your country.
- Check that the available voltage is not higher than the one stated on the rear panel of the unit.
- The power cord should always be in perfect condition. Switch the unit immediately off when the power cord is squashed or damaged. It must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Never let the power-cord come into contact with other cables!
- This fixture must be earthed to in order comply with safety regulations.
- Don't connect the unit to any dimmer pack.
- Always use an appropriate and certified safety cable when installing the unit.
- In order to prevent electric shock, do not open the cover. Apart from the lamp and mains fuse there are no user serviceable parts inside.
- **Never** repair a fuse or bypass the fuse holder. **Always** replace a damaged fuse with a fuse of the same type and electrical specifications!
- In the event of serious operating problems, stop using the fixture and contact your dealer immediately.
- The housing and the lenses must be replaced if they are visibly damaged.
- Please use the original packing when the device is to be transported.
- Due to safety reasons it is prohibited to make unauthorized modifications to the unit.

**Important:** Never look directly into the light source! Don't use the effect in the presence of persons suffering from epilepsy.

**DESCRIPTION**



1. **MAINS CABLE:** Connect the cable to the mains to power the unit.
2. **DMX INPUT:** 3pin male XLR-connector used to connect universal DMX-cables. This input receives instructions from a DMX-controller or from the Master unit in Master/slave mode.
3. **DMX OUTPUT:** 3pin male XLR-connector used to connect universal DMX-cables. Use this output to connect the next unit in the DMX chain
4. **BRACKET:** use the hole in this bracket to fix the unit to a mounting clamp or use the double bracket as a floor stand
5. **DISPLAY:** shows the various menus and the selected functions.
6. **NAVIGATION BUTTONS:**

[MENU]	To browse the different menu options
[UP]	To increase a value
[DOWN]	To decrease a value
[ENTER]	To confirm the selected functions or to go to the next submenu

7. **USB-C Connector:** connect the supplied USB-C cable (with power adapter) here to charge the battery or to power the unit via 230V (only on the ACCU version)
8. **BATTERY LED:** shows the status of the battery when charging
  - RED: the battery is still charging
  - GREEN: the battery is fully charged. The unit can be powered via its internal battery
9. **POWER SWITCH:** to switch the unit ON or OFF (only on the ACCU version)
10. **M-DMX INPUT:** Please note that this USB-connector is NOT used for updates or to connect the unit to a PC! Instead this USB-connector makes it very easy to add wireless DMX to the unit! Just add the (optional) WTR-DMX DONGLE from BRITEQ® and you will get wireless DMX! Moreover, you will be able to connect other DMX-controlled equipment to the DMX-output so you can share the wireless DMX function with all connected units! No extra settings to be made in the setup menu, just follow the procedure in the user manual supplied with the WTR-DMX DONGLE from BRITEQ®. The separate WTR-DMX DONGLE is available from [WWW.BRITEQ-LIGHTING.COM](http://WWW.BRITEQ-LIGHTING.COM) (order code: 4645)



## OVERHEAD RIGGING

- **Important:** The installation must be carried out by qualified service personal only. Improper installation can result in serious injuries and/or damage to property. Overhead rigging requires extensive experience! Working load limits should be respected, certified installation materials should be used, the installed device should be inspected regularly for safety.
- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- Locate the fixture in a well ventilated spot, far away from any flammable materials and/or liquids. The fixture must be fixed **at least 50cm** from surrounding walls.
- The device should be installed out of reach of people and outside areas where persons may walk by or be seated.
- Before rigging make sure that the installation area can hold a minimum point load of 10times the device's weight.
- Always use a certified safety cable that can hold 12 times the weight of the device when installing the unit. This secondary safety attachment should be installed in a way that no part of the installation can drop more than 20cm if the main attachment fails.
- The device should be well fixed; a free-swinging mounting is dangerous and may not be considered!
- Don't cover any ventilation openings as this may result in overheating.
- The operator has to make sure that the safety-relating and machine-technical installations are approved by an expert before using them for the first time. The installations should be inspected every year by a skilled person to be sure that safety is still optimal.

## HOW TO SET UP AND CONTROL THE UNIT

### 1) SOUND CONTROLLED MODE A4:

The unit runs a preprogrammed sequence to the rhythm of the music. Select this mode when only 1 unit is used (standalone) or when the unit is placed as the first (master) unit in a chain with several units.

- Press the [MENU] button until the display shows: [A4.00] (A4. Followed by 2 numbers)
- Now use the [UP] or [DOWN] to select on of the 19 different sound modes.

### 2) FULL AUTOMATIC MODES A2. A3. A5. A6. A7.

The unit automatically runs a preprogrammed sequence. Different automatic modes are available:

#### COLOR CHANGE A2.

- Press the [MENU] button until the display shows [A2.00] (A2. Followed by 2 numbers)
- Now use the [UP] or [DOWN] to select the desired speed. (01=slowest, 32=fastest)

#### COLOR FADE A3.

- Press the [MENU] button until the display shows [A3.00] (A3. Followed by 2 numbers)
- Now use the [UP] or [DOWN] to select one of the 19 different modes.
- Press the [ENTER] button
- Now use the [UP] or [DOWN] to select the desired speed. (01=slowest, 32=fastest)

#### COLOR CHANGE + STROBE A5.

- Press the [MENU] button until the display shows [A5.00] (A5. Followed by 2 numbers)
- Now use the [UP] or [DOWN] to select one of the 19 different modes.
- Press the [ENTER] button
- Now use the [UP] or [DOWN] to select the desired strobe speed. (01=slowest, 32=fastest)

#### AUTOMATIC RANDOM MODE A6.

- Press the [MENU] button until the display shows [A6.01]
- A show of different types of effects (fade, color change, strobe, ...) will start

#### COLOR CHANGE + PULSE EFFECT A7.

- Press the [MENU] button until the display shows [A7.00] (A7. Followed by 2 numbers)
- Now use the [UP] or [DOWN] to select one of the 19 different modes.

- Press the [ENTER] button
- Now use the [UP] or [DOWN] to select the desired pulse speed. (01=slowest, 32=fastest)

**3) STATIC COLOR MODES A1. & RGBW.**

You can set a static color in 2 Different ways:

**PRESET COLOR A1.**

- Press the [MENU] button until the display shows [A1.00] (A1. Followed by 2 numbers)
- Now use the [UP] or [DOWN] to select the desired color

**MANUAL CUSTOM COLOR.**

If you need a color that is not available in the presets, you can compose your own color by adapting the intensity of each individual color (Red, Green, Blue)

- Press the [MENU] button until the display shows [rxxx] (r Followed by 3 numbers)
- Now use the [UP] or [DOWN] to set the intensity of the Red color
- Press the [MENU] button until the display shows [Gxxx] (G Followed by 3 numbers)
- Now use the [UP] or [DOWN] to set the intensity of the Green color
- Press the [MENU] button until the display shows [bxxx] (b Followed by 3 numbers)
- Now use the [UP] or [DOWN] to set the intensity of the blue color

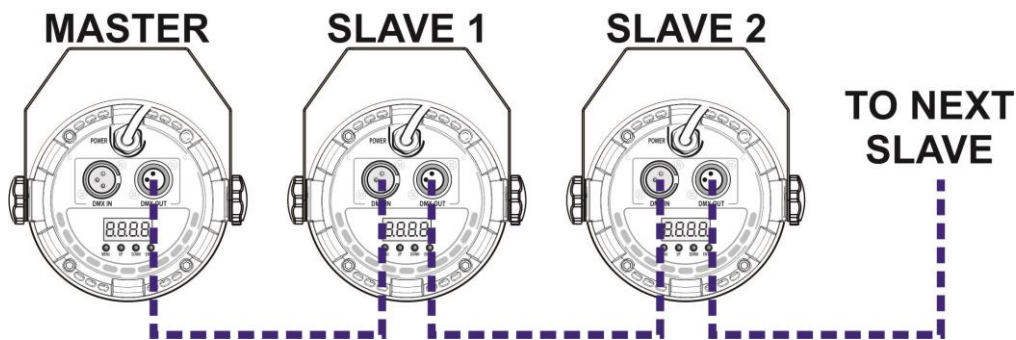
**4) MASTER / SLAVE MODE:**

Several units can be connected together to create nice synchronized shows. The (slave) units will follow the instructions given by the first unit (master) in the chain.

NOTE: it is important to execute the next steps in the correct order

- Set the DMX address of all the slave units to [d001] before to connect them to the master unit .
- Connect the DMX output of the master unit to the input of the first Slave unit.
- Connect the DMX output of the first Slave unit to the input of the second Slave unit.
- Etc.
- Select the desired working mode in your master unit (fixed color, color fade, color change, etc...)
- All the connected slave devices will follow the program of the master unit.

**You can connect up to 32 units together.**

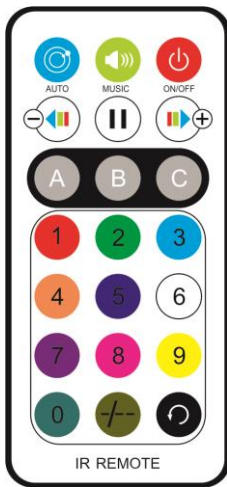


**5) IR REMOTE CONTROLLER:**

The unit can be used with an Infra-Red remote controller.

The IR remote controller is not included but can be ordered separately (IR REMOTE, order code B05545)

**Functions:**



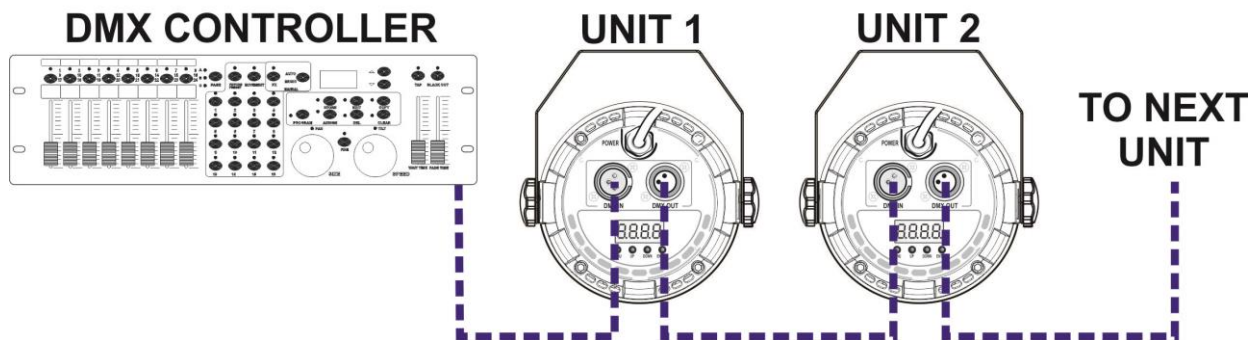
	To switch the effect On or Off
	Press to select the automatic programs
	Press to select the sound activated programs
A	Select Red and use  to adjust its intensity in your custom color
B	Select Green and use  to adjust its intensity in your custom color
C	Select Blue and use  to adjust its intensity in your custom color
	Use these buttons to modify the program / speed. When A, B or C is selected it will modify the intensity of the color
	To pause the program
	Toggle between program and speed when automatic programs are running. Use  to adjust
1	Preset color: Red
2	Preset color: Green
3	Preset color: Light Blue
4	Preset color: Orange
5	Preset color: Blue
6	Preset color: White
7	Preset color: Purple
8	Preset color: Pink
9	Preset color: Yellow
0	Preset color: Cyan
-/--	Preset color: Warm White

**6) DMX CONTROLLED:**

The projector can be controlled by any standard DMX-controller in different DMX-modes.

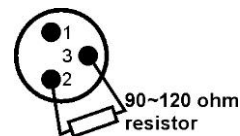
To do this, you need to set the desired start address and dmx mode for each unit

- Press the [MENU] button until the display shows [dMH]
- Press the [ENTER] button
- Use the [UP] or [DOWN] buttons to select the DMX mode you want to use. [03Ch], [05Ch] or [LC02] (check the DMX charts below for more information about these DMX modes)
- Press the [ENTER] button
- Use the [UP] or [DOWN] buttons to select the desired DMX address



**Some more information on DMX512:**

The DMX-protocol is a widely used high speed signal to control intelligent light equipment. You need to "daisy chain" your DMX controller and all the connected light effects with a good quality XLR M/F balanced cable. To prevent strange behavior of the light effects, due to interferences, you must use a 90Ω to 120Ω terminator at the end of the chain. Never use Y-splitter cables, this simply won't work!



Each effect in the chain needs to have its proper starting address so it knows which commands from the controller it has to decode.

**03CH Mode:**

DMX Channel	DMX-value	function
1	000-255	Red color dimmer
2	000-255	Green color dimmer
3	000-255	Blue color dimmer

**LC-02 Mode: To be used with the Ledcon-02 Mk2**

DMX Channel	DMX-value	function
1	000-255	Red color dimmer
2	000-255	Green color dimmer
3	000-255	Blue color dimmer
4	000-190	Master Dimmer
	191-200	Sound
	201-247	Strobe Slow to fast
	248-255	Master Dimmer 100% (full on)

**05CH Mode**

DMX Channel	DMX-value	function
1	000-255	Red color dimmer
2	000-255	Green color dimmer
3	000-255	Blue color dimmer
4	000-255	Master Dimmer
5	000	No Effect
	001-010	Sound Control
	011-255	Strobe Slow to fast



## 06CH Mode

DMX Channel	DMX-value	function
1	000-255	Red color dimmer
2	000-255	Green color dimmer
3	000-255	Blue color dimmer
4	000-255	Master Dimmer
5	000-010	MANUAL MODE (use CH1-CH4)
	011-013	Color macro 1
	014-016	Color macro 2
	017-019	Color macro 3
	020-022	Color macro 4
	023-025	Color macro 5
	026-028	Color macro 6
	029-031	Color macro 7
	032-034	Color macro 8
	035-037	Color macro 9
	038-040	Color macro 10
	041-043	Color macro 11
	044-067	Color Change (Speed Control = Channel 6)
	068-070	Color Fade A3.01 (Speed Control = Channel 6)
	071-073	Color Fade A3.02 (Speed Control = Channel 6)
	074-076	Color Fade A3.03 (Speed Control = Channel 6)
	077-079	Color Fade A3.04 (Speed Control = Channel 6)
	080-082	Color Fade A3.05 (Speed Control = Channel 6)
	083-085	Color Fade A3.06 (Speed Control = Channel 6)
	086-088	Color Fade A3.07 (Speed Control = Channel 6)
	089-092	Color Fade A3.08 (Speed Control = Channel 6)
	093-095	Color Fade A3.09 (Speed Control = Channel 6)
	096-098	Color Fade A3.10 (Speed Control = Channel 6)
	099-101	Color Fade A3.11 (Speed Control = Channel 6)
	102-104	Color Fade A3.12 (Speed Control = Channel 6)
	105-107	Color Fade A3.13 (Speed Control = Channel 6)
	108-110	Color Fade A3.14 (Speed Control = Channel 6)
	111-113	Color Fade A3.15 (Speed Control = Channel 6)
	114-116	Color Fade A3.16 (Speed Control = Channel 6)
	117-119	Color Fade A3.17 (Speed Control = Channel 6)
	120-122	Color Fade A3.18 (Speed Control = Channel 6)
	123-125	Color Fade A3.19 (Speed Control = Channel 6)
	126-128	Sound mode A4.01
	129-131	Sound mode A4.02
132-134	Sound mode A4.03	
135-137	Sound mode A4.04	
138-140	Sound mode A4.05	
141-143	Sound mode A4.06	

144-146	Sound mode A4.07
147-149	Sound mode A4.08
150-152	Sound mode A4.09
153-155	Sound mode A4.10
156-158	Sound mode A4.11
159-161	Sound mode A4.12
162-164	Sound mode A4.13
165-167	Sound mode A4.14
168-169	Sound mode A4.15
170-171	Sound mode A4.16
172-173	Sound mode A4.17
174-175	Sound mode A4.18
176-177	Sound mode A4.19
178-179	Random mode A5.01 (Speed Control = Channel 6)
180-181	Random mode A5.02 (Speed Control = Channel 6)
182-183	Random mode A5.03 (Speed Control = Channel 6)
184-185	Random mode A5.04 (Speed Control = Channel 6)
186-187	Random mode A5.05 (Speed Control = Channel 6)
188-189	Random mode A5.06 (Speed Control = Channel 6)
190-191	Random mode A5.07 (Speed Control = Channel 6)
192-193	Random mode A5.08 (Speed Control = Channel 6)
194-195	Random mode A5.09 (Speed Control = Channel 6)
196-197	Random mode A5.10 (Speed Control = Channel 6)
198-199	Random mode A5.11 (Speed Control = Channel 6)
200-201	Random mode A5.12 (Speed Control = Channel 6)
202-203	Random mode A5.13 (Speed Control = Channel 6)
204-205	Random mode A5.14 (Speed Control = Channel 6)
206-207	Random mode A5.15 (Speed Control = Channel 6)
208-209	Random mode A5.16 (Speed Control = Channel 6)
210-211	Random mode A5.17 (Speed Control = Channel 6)
212-213	Random mode A5.18 (Speed Control = Channel 6)
214-215	Random mode A5.19 (Speed Control = Channel 6)
216-217	Random mode A6
218-219	A7.01 Color Change + Pulse (Speed Control = Channel 6)
220-221	A7.02 Color Change + Pulse (Speed Control = Channel 6)
222-223	A7.03 Color Change + Pulse (Speed Control = Channel 6)
224-225	A7.04 Color Change + Pulse (Speed Control = Channel 6)
226-227	A7.05 Color Change + Pulse (Speed Control = Channel 6)
228-229	A7.06 Color Change + Pulse (Speed Control = Channel 6)
230-231	A7.07 Color Change + Pulse (Speed Control = Channel 6)
232-233	A7.08 Color Change + Pulse (Speed Control = Channel 6)
134-235	A7.09 Color Change + Pulse (Speed Control = Channel 6)
236-237	A7.10 Color Change + Pulse (Speed Control = Channel 6)
238-239	A7.11 Color Change + Pulse (Speed Control = Channel 6)

	240-241	A7.12 Color Change + Pulse (Speed Control = Channel 6)
	242-243	A7.13 Color Change + Pulse (Speed Control = Channel 6)
	244-245	A7.14 Color Change + Pulse (Speed Control = Channel 6)
	246-247	A7.15 Color Change + Pulse (Speed Control = Channel 6)
	248-249	A7.16 Color Change + Pulse (Speed Control = Channel 6)
	250-251	A7.17 Color Change + Pulse (Speed Control = Channel 6)
	252-253	A7.18 Color Change + Pulse (Speed Control = Channel 6)
	254-255	A7.19 Color Change + Pulse (Speed Control = Channel 6)
<b>6</b>	000-255	Auto Program SPEED

## MAINTENANCE

- Make sure the area below the installation place is free from unwanted persons during servicing.
- Switch off the unit, unplug the mains cable and wait until the unit has been cooled down.

### **During inspection the following points should be checked:**

- All screws used for installing the device and any of its parts should be tightly fastened and may not be corroded.
- Housings, fixations and installations spots (ceiling, truss, suspensions) should be totally free from any deformation.
- When an optical lens is visibly damaged due to cracks or deep scratches, it must be replaced.
- The mains cables must be in impeccable condition and should be replaced immediately when even a small problem is detected.
- In order to protect the device from overheat the cooling fans (if any) and ventilation openings should be cleaned monthly.
- The interior of the device should be cleaned annually using a vacuum cleaner or air-jet.
- The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics.
  - Clean with a soft cloth using normal glass cleaning products.
  - Always dry the parts carefully.
  - Clean the external optics at least once every 30 days.
  - Clean the internal optics at least every 90 days.

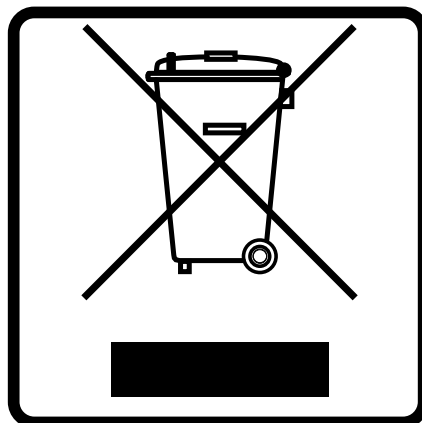
**Attention: We strongly recommend internal cleaning to be carried out by qualified personnel!**

## SPECIFICATIONS

This device was designed to produce decorative effect lighting and is used in light show systems. This unit is radio-interference suppressed. This product meets the requirements of the current European and national guidelines. Conformity has been established and the relevant statements and documents have been deposited by the manufacturer.

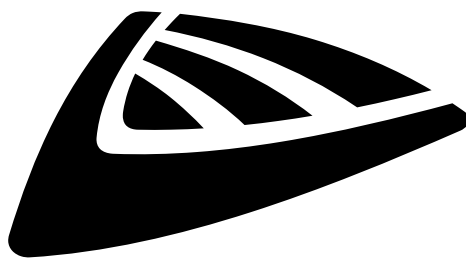
<b>Mains Input MINI-PAR 12TC Mk2:</b>	AC 100~240V, 50/60Hz
<b>Mains Input ACCU MINI-PAR 12TC / COB:</b>	DC 5V
<b>Max. Power consumption 12TC version:</b>	10W
<b>Max. Power consumption COB version:</b>	22W
<b>Sound Control:</b>	Internal microphone
<b>DMX connections:</b>	3pin XLR male / female
<b>DMX channels:</b>	3 / 5 channels + Ledcon-02 Mk2 mode
<b>12TC version LEDs:</b>	12x 3Watt RGB Leds
<b>COB version LED:</b>	15Watt RGB COB Led
<b>Working temperature:</b>	10°C to 40°C
<b>Size:</b>	150x160x90mm
<b>Weight:</b>	0.4 kg / 0.7 kg (accu version)

All the information is subject to change without prior notice You can download the latest version of this user manual on our website: [www.ib-systems.eu](http://www.ib-systems.eu)



### **DISPOSAL OF THE DEVICE**

Dispose of the unit and used batteries in an environment friendly manner according to your country regulations.



# **JBSYSTEMS**

## **MAILING LIST**

**EN: Subscribe today to our mailing list for the latest product news!**

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**NL: Abonneer je vandaag nog op onze mailinglijst en ontvang ons laatste product nieuws!**

**DE: Abonnieren Sie unseren Newsletter und erhalten Sie aktuelle Produktinformationen!**

**ES: Suscribete hoy a nuestra lista de correo para recibir las últimas noticias!**

**PT: Inscreva-se hoje na nossa mailing list para estar a par das últimas notícias!**

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