# PENTA V9 BATTERY WIRELESS

QUICK USER MANUAL
RASHA PROFESSIONAL A/S

**Edition Notes**

The Penta V9 Battery Wireless, User Manual Rev. 1 covers the description, safety precautions, installation, programming, operation, and maintenance of the Penta V9 Battery Wireless. Rasha released this edition of the Penta V9 Battery Wireless User Manual in July 2016.

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**Document Printing**

For better results, print this document in color, on letter size paper (8.5 x 11 in), double-sided. If using A4 paper (210 x 297 mm), configure your printer to scale the content accordingly.

**Intended Audience**

Any person in charge of installing, operating, and/or maintaining this product should completely read through the guide that shipped with the product, as well as this manual, before installing, operating, or maintaining this product.

**Document Revision**

The Penta V9 Battery Wireless User Manual Rev. 1 supersedes all previous versions of this manual. Discard any older versions of this manual and replace with this version. Go to www.rashaprofessional.com for the latest version.

| Author | Date | Editor | Date |
|---|---|---|---|
| Robert Becerra | 11/3/2016 | | |

# Table of Contents

**What Is Included**

- Rasha Penta V9 Battery Wireless
- Power Cord (IEC to Edison)
- DMX Cable 3 Pin
- Quick reference guide

**Claims**

Carefully unpack the product immediately and check the box to make sure all the parts are in the package are in good condition. If the box or the contents (the product and included accessories) appear damaged from shipping or show signs of mishandling, notify the carrier immediately, not Rasha. Failure to report damage to the carrier immediately may Void your claim. In addition, keep the box and contents for inspection.

For other issues, such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with Rasha within 7 days of delivery.

**Manual Conventions**

| Convention | Meaning |
|------------|---------|
| 1–512 | DMX value range in number |
| 50/60 | A set of mutually exclusive values in the text |
| <SET> | A button on the product's control panel |
| Settings | A product function or a menu option |
| 0-512 | A sequence of menu options |
| 1-10 | A range of menu values from which to choose in a menu |
| Yes/No | A set of two mutually exclusive menu options in a menu |
| ON | A unique value to be entered or selected in a menu |

**Symbols**

| Symbols | Meaning |
|---------|---------|
|  |  |
|  |  |
|  |  |

The term "DMX" used throughout this manual refers to the DMX512 digital data transmission protocol

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| Safety Notes | Read all the following Safety Notes before working with this product. These notes include important information about the installation, usage, and maintenance of this product. This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained Rasha certified technicians. Do not open the housing or attempt any repairs. All applicable local codes and regulations apply to proper installation of this product. |
|---|---|
| **Personal Safety** | Avoid direct eye exposure to the light source while the product is on. Always disconnect this product from its power source before servicing. Always connect this product to a grounded circuit to avoid the risk of electrocution. Do not touch this product's housing during operation because it may be very hot. |
| **Rigging** | This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture. (IP20) CAUTION: When transferring product from extreme temperature environments, (e.g. cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding environment before connecting it to power. Mount this product in a location with adequate ventilation, at least 20 inches (50 cm) from adjacent surfaces. Make sure there are no flammable materials close to this product while it is operating. Always carry this product by the handles. Do not carry from the head. When hanging this product, always secure to a fastening device using a safety cable. |
| **Power And Wiring** | Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label. Never connect this product to a dimmer pack or rheostat. Never disconnect this product by pulling or tugging on the power cable. |
| **Operation** | Do not operate this product if you see damage to the housing, lenses, or cables. Have the damaged parts replaced by an authorized technician at once. To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it. Do not cover the ventilation slots when operating to avoid internal overheating. Do not aim this product toward the Sun. The lenses could concentrate the solar energy and cause internal overheating. The maximum ambient temperature is 113 °F (45 °C). Do not operate this product at a higher temperature. In case of a serious operating problem, stop using this product immediately! |

| Use on Dimmer | Auto Programs |
|---|---|
| Outdoor Use | Auto-Ranging Power Supply |
| Sound-Activated | Replaceable Fuse |
| DMX | User-Serviceable |
| Master/Slave | |

**The term "DMX" used throughout this manual refers to the DMX512 digital data transmission protocol**
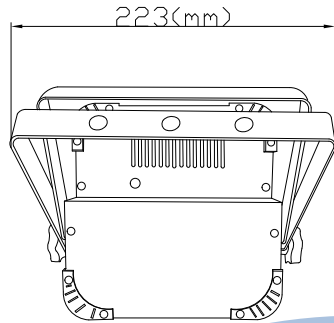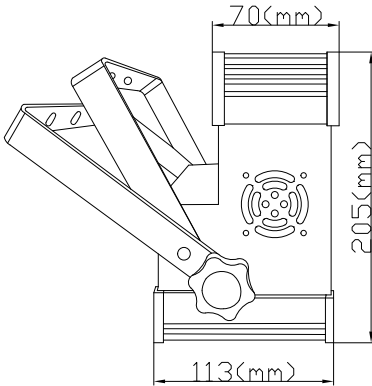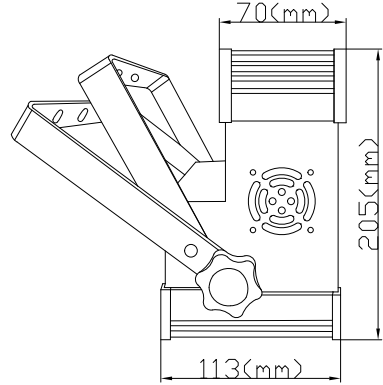
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# INTRODUCTION

## Features

- Built in Battery Power and DMX wireless
- Create rich colors and pastels with RGBAW color led chips
- Master/slave wirelessly linkable 2.4 GHz with other fixtures for a coordinated light show
- Create coordinated light shows by linking other fixtures in master/slave mode
- Set up and tear down in a fraction of the time by eliminating the need for DMX or power cables
- Convenient wireless control using 2.4GHz
- Wireless control of sectional, eye-catching chase effects via DMX
- Extend the battery life span with built-in discharge protection
- Access built-in, eye-catching automated and sound-active programs via wireless DMX or master/slave mode
- Enhance light shows with adjustable electronic strobe and dimmer effects
- Compact design easily fits inside sticks of truss or stand free.
- Custom color customization function

## Description

Penta V9 Battery Wireless up light is designed for the mobile entertainer, elemintating the hassle of serching for electricity, running generator, battery backup and or cables. Penta V9 Battery Wireless it has built in rechargeable lithium-ion battery, 2.4 GHz wireless DMX receiver, static RED, GREEN, BLUE, AMBER and WHITE color, with the ablity to custom mix color. Penta V9 Battery Wireless delivers stunning RGBAW colors and nearly eliminate multicolored shadows. User can set fixtures at any events, theater, bar, or any entertainment industry wiht the ablilty to control up to 20 Fixtures* by DMX wirelessly.

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# OVERVIEW

205(mm)

70(mm)
205(mm)
113(mm)

70(mm)
205(mm)
113(mm)

223(mm)

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RASHA | Professional
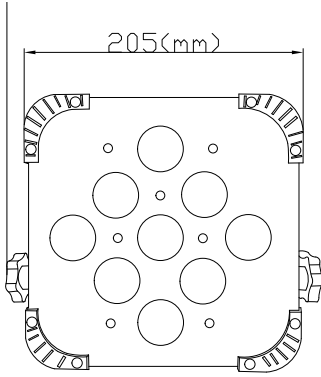
## Power Supply

Each Penta V9 Battery Wireless has an auto-ranging power supply that works with an input voltage range of 100 to 240 VAC, 50/60 Hz. To determine the power requirements for each Penta V9 Battery Wireless refer to the label affixed to the product. You can also refer to the Technical Specifications chart in this manual. The listed current rating indicates the maximum current draw during normal operation. For more information, you may download Sizing Circuit Breakers from the Rasha website: www.rashaprofessional.com

Always connect this product to a protected circuit with an appropriate electrical ground to avoid the risk of electrocution or fire. To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.

Never connect this product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

## AC Plug

The Penta V9 Battery Wireless comes with a power input cord terminated with a Neutrik® powerCON® A connector on one end and an Edison plug on the other end (U.S. market). If the power input cord that came with your product has no plug, or if you need to change the Edison plug, use the table below to wire the new plug.

| Connection | Wire (U.S.) | Wire (Europe) | Screw Color |
|---|---|---|---|
| AC Live | Black | Brown | Yellow or Brass |
| AC Neutral | White | Blue | Silver |
| AC Ground | Green/Yellow | Green/Yellow | Green |

## Fuse Replacement

1. Disconnect this product from the power outlet.
2. Using a flat-head screwdriver, lift the fuse holder cap from the housing.
3. Remove the blown fuse and replace with a another fuse of the same type and rating (T 5 A).
4. press the fuse holder cap back in place and reconnect power.

Make sure to disconnect the product's power cord before replacing a blown fuse. Always replace the blown fuse with another of the same type and rating

## Power Linking

You can link 10 Fixtures @ 110V and 20 fixtures @ 220V. This is for charging only.

## DMX Personalities

- The Penta V9 Battery Wireless uses a 3-pin DMX data connection for the 6 or 11 channel DMX personalities.
- Refer to the Introduction  chapter for a brief description of each DMX personality.
- Refer to the Operation chapter to learn how to configure the Penta V9 Battery Wireless to work in these personalities.
- The DMX Values section provides you with detailed information regarding the DMX personalities

If you are not familiar with or need more information about DMX standards, Master/Slave  connectivity, or the DMX cables needed to link this product to a DMX controller, download the DMX Handbook from the Rasha website: www.rashaprofessional.com

## Before mounting this product, read and follow the Safety Notes. For our Rasha® Professional line of mounting clamps, go to http://rashaprofessional.com/en/accesories

**Orientation**

Always mount this product in a safe position and make sure there is adequate room for ventilation, configuration, and maintenance

Rasha recommends using the following general guidelines when mounting this product.

**Rigging**

- When selecting an installation location, consider easy access to this product for operation, programming adjustments, and routine maintenance.
- Make sure to mount this product away from any flammable material as indicated in the Safety Notes.
- Never mount in places where rain, high humidity, extreme temperature changes, or restricted ventilation may affect the product.
- If hanging this product, make sure that the mounting location can support the product's weight. See the Technical Specifications for the weight-bearing requirements of this product.
- When hanging this product, always secure to a fastening device using a safety cable.

**Procedures**

The Penta V9 Battery Wireless comes with a preinstalled mounting surface to which you will be able to attach most of our clamps found at www.rashaprofessional.com/en/accesories. Make sure the clamps are capable of supporting the weight of this product. Use at least 1 mounting point per product. In addition, use a safety cable to link the product to the structure.

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# MENU MAP

**RASHA** *Professional*

Addr ——————→ 1-512

Chnd ——————→ 6
        └———————→ 11

SLMd ——————→ SLaU
        ├———————→ MaSt
        ├———————→ SYnc
        └———————→ CLiC

SHMd ——————→ CoLo 1-38
        ├———————→ FadE 1-3
        ├———————→ FLaS 1-100
        └———————→ Auto 1-9

Soun ——————→ 1-6

CuSt ——————→ CC1-CCS

dimm ——————→ 1-3

bLnd ——————→ on
        └———————→ oFF

LEd ——————→ on
        └———————→ oFF

diSP

tESt

FhrS

UEr

rESt

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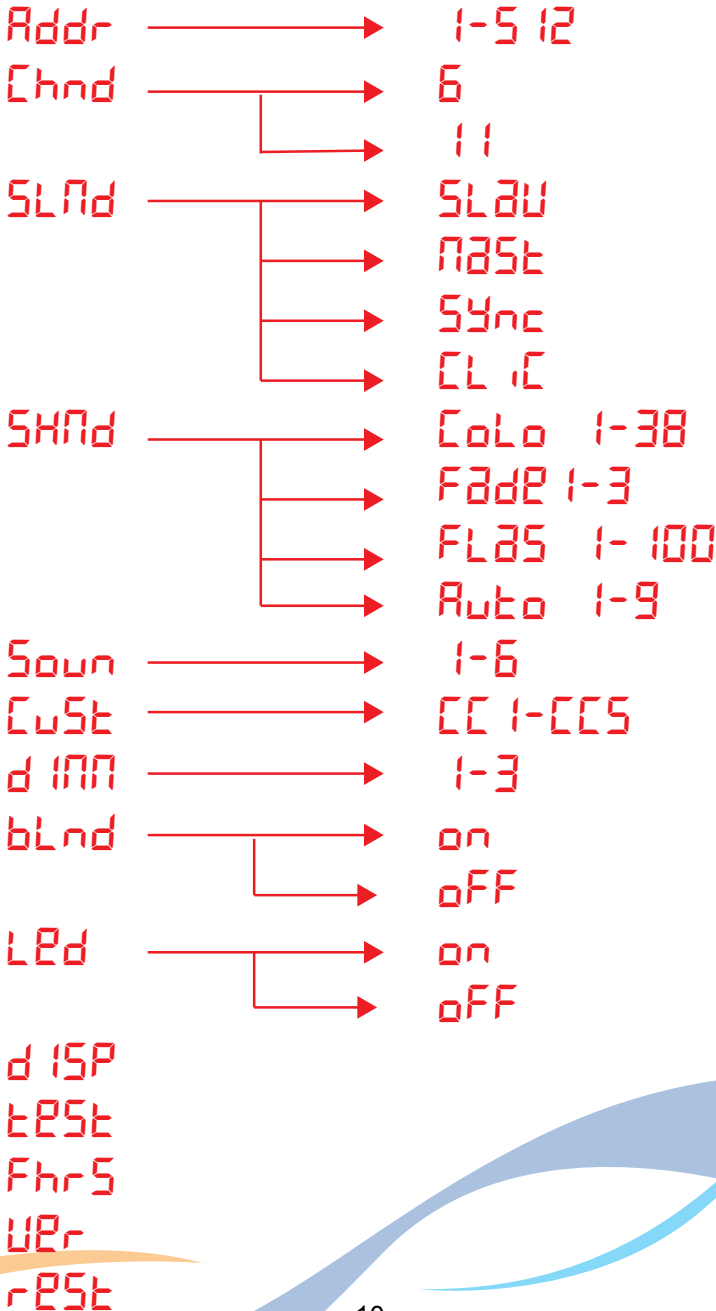
**1. Intro**

The light panel diagram show as below, The Display support Display & operation just like any analong menu in todays market, Touching the approprate buttons will set or modify setting.

**2. Operation**

1. Operate light with touch or encoder button

- Top Left Sets your Fixtures Address
- Top Center Displays your Fixures Modes of operation
- Top Right Displays Test Mode
- Bottom Left Displays options for Display, (i.e. Screen Rotation)
- Bottom Center displays Advanced option for Fixture.
- Bottom Left diplays current mode, DMX address, Fixture Information.
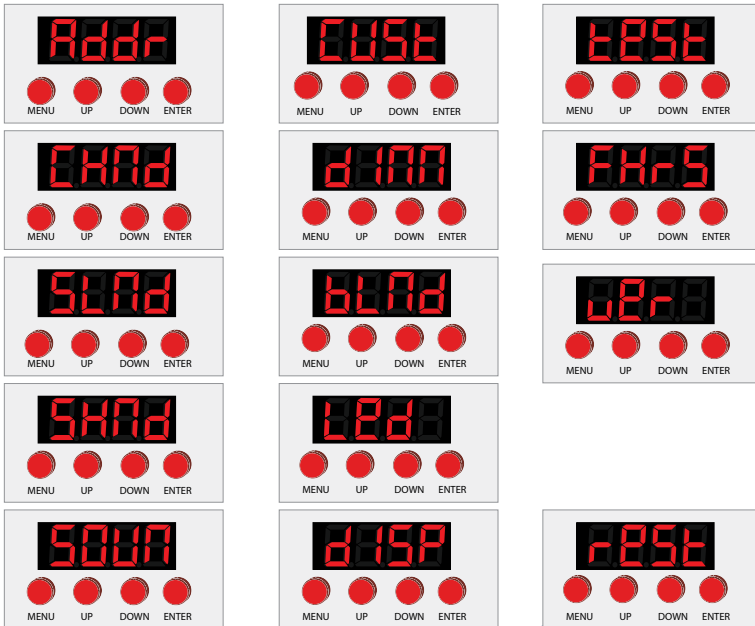
**2. Parameter value setting**

Press MENU to navagate menu

• press <UP> or <DOWN> to scroll to correct setting. Touch <Enter> to enter sub menu.

• Set and save value. Touch <ENTER> submenu.

**3. Sub-Menu**

• Select desired sub menu from main menu to enter corresponding sub menu shown below. There is a of total 14 menu programs, includes class of parameter and status:

• Addr - Select DMX address

• Chnd - Select DMX Channels 6/11

• Slnd - Select Enable Slave, Master,Sync or IR mode

• Shnd

  • Select color presets

  • Fade speed

  • Flash speed

  • Auto speed

• Soun - Select sensitivity

• Cust - Set values for up to 5 custom Color

• Dinn - Dimmer

• Blnd - Black out

• LED - Turn off LED display

• Disp - Invert Dispaly

• Test - Test Mode

• Fhrs - Fixture Hours

• Ver - Firmware Version

• Rest - Rest all values to Factory Settings

# DMX VALUES

## 6 CH Mode

| Channel | Value | Description |
|---------|-------|-------------|
| CH1 | 0 | No action |
| | **1-255** | Red (Intensity 0 to 100%) |
| CH2 | 0 | No action |
| | **1-255** | Green (Intensity 0 to 100%) |
| CH3 | 0 | No action |
| | **1-255** | Blue (Intensity 0 to 100%) |
| CH4 | 0 | No action |
| | **1-255** | Amber(Intensity 0 to 100%) |
| CH5 | 0 | No action |
| | **1-255** | White (Intensity 0 to 100%) 5 0 |
| CH6 | 0 | No Action |
| | **1-255** | Strobe speed 0-99 |

⚠ If working in 6 Channel mode make sure that DMX faders 6 are to at full 255 and 1-5 are your colors.

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# DMX VALUES

## *11 CH Mode*

| Channel | Value | Description |
|---------|-------|-------------|
| CH1 | 0 | No action(blackout) |
|  | **1 - 255** | Red 0-100% |
| CH2 | 0 | No action (blackout) |
|  | **1 - 255** | Green 0-100% |
| CH3 | 0 | No action (blackout) |
|  | **1 - 255** | Blue 0-100% |
| CH4 | 0 | No action (blackout) |
|  | **1 - 255** | Amber 0-100% |
| CH5 | 0 | No action (blackout) |
|  | **1 - 255** | White 0-100% |
|  | 0 - 7 | Off |
|  | **8 - 15** | Color 1 |
|  | 16 - 23 | Color 2 |
|  | **24 - 30** | Color 3 |
|  | 31 - 38 | Color 4 |
|  | **39 - 46** | Color 5 |
|  | 47 - 54 | Color 6 |
|  | **55 - 61** | Color 7 |
|  | 62 - 69 | Color 8 |
|  | **70 - 77** | Color 9 |
|  | 78 - 85 | Color 10 |
|  | **86 - 92** | Color 11 |
|  | 93 - 100 | Color 12 |
|  | **101 - 108** | Color 13 |
|  | 109 - 116 | Color 14 |
|  | **117 - 123** | Color 15 |
|  | 124 - 131 | Color 16 |
|  | **132 - 139** | Color 17 |
|  | 140 - 147 | Color 18 |

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| | | |
|---|---|---|
| | 148 - 154 | Color 19 |
| | **155 - 162** | Color 20 |
| | 163 - 170 | Color 21 |
| | **171 - 178** | Color 22 |
| | 179 - 185 | Color 23 |
| | **186 - 193** | Color 24 |
| | 194 - 201 | Color 25 |
| | **202 - 209** | Color 26 |
| | 210 - 216 | Color 27 |
| | **217 - 224** | Color 28 |
| | 225 - 232 | Color 29 |
| | **233 - 240** | Color 30 |
| | 241 - 247 | Color 31 |
| | **248 - 255** | Color 32 |
| 7 | **0 - 255** | Master Dimmer Intencity 0-100% |
| 8 | **Strobe** | |
| | 0 - 7 | Off |
| | **16-131** | Open |
| | 132-139 | Strobe - slow-fast |
| | **140-181** | Open |
| | 182-189 | Pulse - fast close & slow open |
| | **190-231** | Open |
| | 232-239 | Pulse - slow close & fast open |
| | **240-247** | Open |
| | 248-255 | Random strobe |
| | **248 - 255** | Open |
| 9 | **0 - 255** | RGBAW slow to fast ramdom color change |
| 10 | **0 - 255** | Auto color change slow to fast without strobe |
| 11 | **0 - 255** | Auto color change with strobe along with sound |

⚠ If working in 11 Channel mode make sure that DMX faders 7 & 8 are to at full 255 and 1-5 are your colors.

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rashaprofessional .com | info@rashaprofessional.com

# SPECIFICATIONS

RASHA | Professional

## PHYSICAL

| | |
|---|---|
| Weight : | 7.7 Lbs |
| Dimensions | 200 x 90 x 200 mm (7.8 x 2.3 x 7.8 in.) |

## DYNAMIC EFFECTS

| | |
|---|---|
| Color mixing | RGBAW |
| Color selection | 34 color presets |
| Electronic dimming | 0-100% |
| Strobe and pulse effects | Variable speed and action, random strobe |
| Electronic dimmer effect | Instant open and blackout |

## OPTICS

| | |
|---|---|
| Light source | 9 x 15 W RGBAW LED Chips |
| LEDs Beam angle | 25/40° Minimum |
| LED lifetime | 50,000 hours (to >70% luminous output)* |
| LED Manufacturer's figure obtained under manufacturer's test conditions | |

## CONTROL AND PROGRAMMING

| | |
|---|---|
| Control options | DMX, stand-alone Sound active, Auto, Static Mode, |
| DMX channels | 6/11 |
| Remote type | Superior IR Technology |
| Stand-alone trigger options | Music trig, auto trig, Linkable |
| Standalone built-in shows | Random, preset colors, or variable fade |
| Settings, addressing and programming | Control panel with LED display |
| Sound activation | Adjustable microphone sensitivity |
| DMX compliance | USITT DMX512 or DMX 512 Universal |
| Wireless DMX Transmitter compliance | Universal DMX 512 GHz |

## CONSTRUCTION

| | |
|---|---|
| Color | Black/White |
| Protection rating | IP20 |

## INSTALLATION

| | |
|---|---|
| Mounting | Adjustable folding bracket, |
| Orientation | Any |
| Location | For indoor use only |

## APPROVALS

| | |
|---|---|
| EU safety | EN 60598-1, EN 60598-2-1, I EC/EN 60825-1 |
| EU EMC | EN 55103-1, EN 55103-2, EN 61000-3-2 |
| Canadian safety (US model) | CAN/CSA C.22.2 No. 250 |

## CONNECTIONS

| | |
|---|---|
| AC power in/thru | IEC to Edison |
| DMX data in/thru | 3 -pin locking XLR |
| Wireless DMX Receiver | 2.4 GHz DMX Signal receiver |

## ELECTRICAL

| | |
|---|---|
| AC power | 100-240 V, 50/60 Hz |
| Power consumption | 100 W |
| Fuse | T 5 A |
| Built in Battery | 14000 mAh lion lithium |
| Battery charger | 2A |
| Charging time | 3 hours |

## THERMAL

| | |
|---|---|
| Maximum ambient temperature (Ta max.) | 50° C (122° F) |
| Minimum ambient temperature (Ta min) | 0° C (32° F) |
| Cooling | 2 low noise fan |
| Heat control | Aluminum Heating pan installed |

## ACCESSORIES (SOLD SEPARATELY)

| | |
|---|---|
| 3M US Power cable | P/N 890113 |
| Safety Wire | P/N 890110 |
| 3-pin male XLR connector 5M | P/N 890103 |
| 6 in 1 Charging Road Case | P/N 901306 |

## ORDERING INFORMATION

| | |
|---|---|
| C5V9BW, Natural packing | P/N 819110 |
| 6 in 1 Charging Road case | P/N 819192 |

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# RETURNS

You must send the product prepaid, in the original box, and with the original packing and accessories. Rasha Professional will not issue call tags.

Visit www.rashaprofessional.com to log into your account and request a Return Merchandise Authorization (RMA) number before shipping the product. Be prepared to provide the model number, your order numver, serial number, and a brief description of the Claim(s) for the return.

Clearly label the package with an RMA number. Rasha will refuse any product returned without an RMA number.

DO NOT write the RMA number directly on the box. Instead, write it on a properly affixed label.

Once you have received the RMA number, include the following information on a piece of paper inside the box:

• Your name
• Your address
• Your phone number
• The RMA number
• A brief description of the problem(s).

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be the customer's responsibility.

Double-boxing is recommended. Rasha reserves the right to use its own discretion to repair or replace returned product(s).

# CONTACT US

WORLD HEADQUARTERS - RASHA GENERAL INFORMATION
ADDRESS: NO 501 FENGHUANG INDUSTRIAL ZONE,SANDONG
AVENUE,HUADU DISTRICT,GUANGZHOU,CHINA
VOICE: (00866) 020- 37726213

Technical Support
Email: Support@rashaprofessional.com

www.rashaprofessional.com | www.rashalight.com
UNITED STATES – Rasha Professional A/S LLC.
General Information

California
Address: 1800 Rustin Ave., Riverside CA 92507
Voice: +1 (951) 654 3585

Outside the U.S.contact the dealer of record. Follow their
instructions to request support or to return a product. Visit our
website for contact details.

## Color Chart Reference

|   | Value | Description |
|---|-------|-------------|
|   | 0-7 | No action (blackout) |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |
| 11 |  |  |
| 12 |  |  |
| 13 |  |  |
| 14 |  |  |
| 15 |  |  |
| 16 |  |  |
| 17 |  |  |
| 18 |  |  |
| 19 |  |  |
| 20 |  |  |
| 21 |  |  |

## Color Chart Cont.

|   | Value | Description |
|---|-------|-------------|
| 22 |  |  |
| 23 |  |  |
| 24 |  |  |
| 25 |  |  |
| 26 |  |  |
| 27 |  |  |
| 28 |  |  |
| 29 |  |  |
| 30 |  |  |
| 31 |  |  |
| 32 |  |  |
| 33 |  |  |
| 34 |  |  |
| 35 |  |  |
| 36 |  |  |
| 37 |  |  |
| 38 |  |  |