

PREFACE

About These Instructions

The document provides basic information on installation and operational instructions for a qualified, trained installer. These instructions provide information for the following product:

- AP-150-RGBW Par Luminaire

Note: Additional product information, including a comprehensive manual with DMX mapping, menu operation, and more can be found on our web site at www.altmanlighting.com or by scanning the QR code to the right.

Please read all instructions before installing or using this product. *Retain these instructions for future reference.*

Have a question regarding these instructions?

The material in this document is for information purposes only and is subject to change without notice. Altman Lighting assumes no responsibility for any errors or omissions which may appear in this document. Should you find an error, have a suggestion or question regarding your Altman Lighting product, we would love to hear from you.

You can reach us at:

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Yonkers, New York 10701
1.914.476.7987 (Main)
1.914.963.7304 (Fax)
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customerservice@altmanlighting.com



Scan QR code to go to the AP-150-RGBW Par Luminaire web page.

Note: Information contained in this document may not be duplicated in full or in part by any person without prior written approval of Altman Lighting. Its sole purpose is to provide the user with conceptual information on the equipment mentioned. The use of this document for all other purposes is specifically prohibited.

Our Commitment

Altman Lighting continually engages in research related to product improvement. New materials, production methods and design refinements are introduced into existing products without notice as a routine expression of the philosophy. For this reason any current Altman Lighting product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise noted.

Version as of: **07 September 2018 (Rev. 0)**

AP-150-RGBW Par Luminaire INSTALLATION INSTRUCTIONS / INSTRUCTIONS D'INSTALLATION

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CLEANING AND CARE



WARNING! All cleaning should be performed with power completely removed from the luminaire. Never remove protective covers when luminaire is powered. Wear appropriate protective eye wear and gloves when cleaning the fixture. All service and maintenance, other than described herein, should be performed by a qualified technician or Authorized Service Center. **AT NO TIME SHOULD THE LED BE TOUCHED.** The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.



WARNING! Under no circumstances should ammonia-based cleaners, acetone, or other harsh solvents be used on or near the AP-150-RGBW Par Luminaire. These types of cleaners or solvents can permanently damage the optics or housings of the fixture.

For all other service and maintenance issues, please contact your local Altman Lighting office or an Authorized Service Center.



WARNING! Disassembly (other than as described herein), alterations, unauthorized service, etc. will void the product warranty. Contact your local Altman Lighting office or an Authorized Service Center for technical support and service.

IMPORTANT INFORMATION

Product Safety Notices

When using electrical equipment, basic safety precautions should always be followed including the following:



- a. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
- b. Do not use outdoors unless the product is specified to operate in outdoor environments.
- c. Do not mount near gas or electric heaters.
- d. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- e. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- f. Do not use this equipment for other than intended use.
- g. Refer service to qualified personnel.

SAVE THIS DOCUMENT FOR FUTURE REFERENCE.

Warnings



WARNING: RISK OF ELECTRICAL SHOCK! You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by removing fuses or turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltages and damage the device. It is always recommended that a “lock out tag” device is installed on the appropriate circuit disconnect prior to beginning electrical work of any kind. A qualified electrician must perform this installation.

WARNING: Insulation between low-voltage supply and control conductors is provided by basic insulation.

WARNING: Refer to National Electrical Code® and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to personnel.

WARNING: This equipment is intended for installation in accordance with the National Electric Code® and local regulations. It is also intended for installation in indoor applications only. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

WARNING: This Lighting Fixture IS NOT for residential installation or use.

WARNING: The structure where fixture(s) is to be mounted must be capable of supporting the weight of the fixture and its accessories. This fixture is for temporary, portable mounting only.

WARNING: The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY:

A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE.

CONSULT A QUALIFIED ELECTRICIAN TO ENSURE CORRECT BRANCH CIRCUIT CONDUCTOR.

CONSULTER UN ÉLECTRICIEN QUALIFIÉ POUR VOUS ASSURER QUE LES CONDUCTEURS DE LA DÉRIVATION SONT ADÉQUATS.

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Altman Lighting Product Warranty

Warranty Term

Altman Lighting, Inc., a subsidiary of Altman Stage Lighting Company, Inc., herein referred to as Altman, warrants each new product (except for spare parts or products Altman does not manufacture) for a period of TWO (2) years from date of shipment to correct by repair or replacement any part defect due to faulty material or workmanship. Under these same terms products with an LED light source shall be warranted for a period of THREE (3) years.

Altman warrants for NINETY (90) days any spare part it manufactures. On spare parts or products Altman does not manufacture, including, but not limited to, lamps, sockets, lenses, roundels, electronics, ignitors, ballasts, etc.; Altman will grant the same warranty given Altman by its vendors.

Altman assumes no responsibility for damage or faulty performance caused by misuse, improper installation, careless handling or where repairs have been attempted by others.

This warranty is in lieu of all warranties or guarantees expressed or implied and no representative or person is authorized to assume Altman any other liability with the sale of Altman's products.

For complete warranty terms and conditions, please refer to our web site at www.altmanlighting.com.

Warranty Service

In order to request warranty service, you must receive a Return Material Authorization (RMA) number prior to return.

Return shipments must be visibly marked with the RMA number; the product must be returned (*shipping prepaid*) to the factory at:

Altman Lighting Inc.
Attention: RMA # _____
57 Alexander Street
Yonkers, NY 10701

The return must be within THIRTY (30) days of receiving the RMA from Altman.

INSTALLATION AND SET UP

Overview

The AP-150-RGBW Par Luminaire is designed as a portable Par fixture for indoor use only. The unit can be mounted via a C-clamp (sold separately) or used on the ground using the fixture's kickstand yoke.

Power Connection Warnings

Before performing any field wiring, refer to and read the warnings contained in "**Important Information**" on page 2.



WARNING! The AP-150-RGBW Par Luminaire should be connected to a constant circuit or a relay device. It should never be connected to a dimmer or circuit controlled by a dimmer. Read "**Connecting Power**" on page 3 carefully on how to properly connect your fixture.



WARNING! The maximum allowable input current is 20 Amps. Do not overload circuits! Luminaires must be supplied by a branch circuit protected by a maximum 20 Amp circuit protector. Doit être alimenté par un circuit de dérivation protégé par un maximum de 20 ampères circuit protecteur. Ne surchargez pas les circuits!



WARNING! When using the daisy-chain connection method, only connect your AP-150-RGBW Par Luminaire to AC Output Connection of other AP-150-RGBW Par Luminaires. DO NOT CONNECT OTHER TYPES OF LUMINAIRES OR DEVICES! The maximum allowable of number of AP-150-RGBW Par Luminaires that can be daisy-chained on one power feed should not exceed the first fixture's 16 Amp power rating.

Connecting Power

Units are powered via an AC input cable from 100 to 240VAC, 50/60Hz and draw approximately 135 Watts of power. **Table 1**, outlines the wire colors and their purpose.

Table 1: AC Input Wiring

Wire Color	Purpose
Brown or Black	Main / (L)ine
Blue or White	(N)eutral
Green/Yellow or Green	Ground / Earth

Note: See **Figure 1** on **page 4** for wiring connections.



IMPORTANT! The AP-150-RGBW Par Luminaire must be connected to and properly grounded to a viable earth ground.

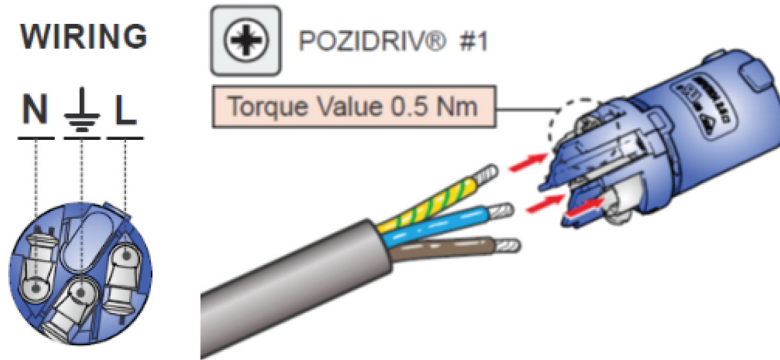


Figure 1: PowerCON (Blue AC Input) Connector Wiring

The unit has one AC input connector and one AC throughput (out) connector. It is very important that the total current passing through the unit not exceed the rating indicated on the rear panel overlay.

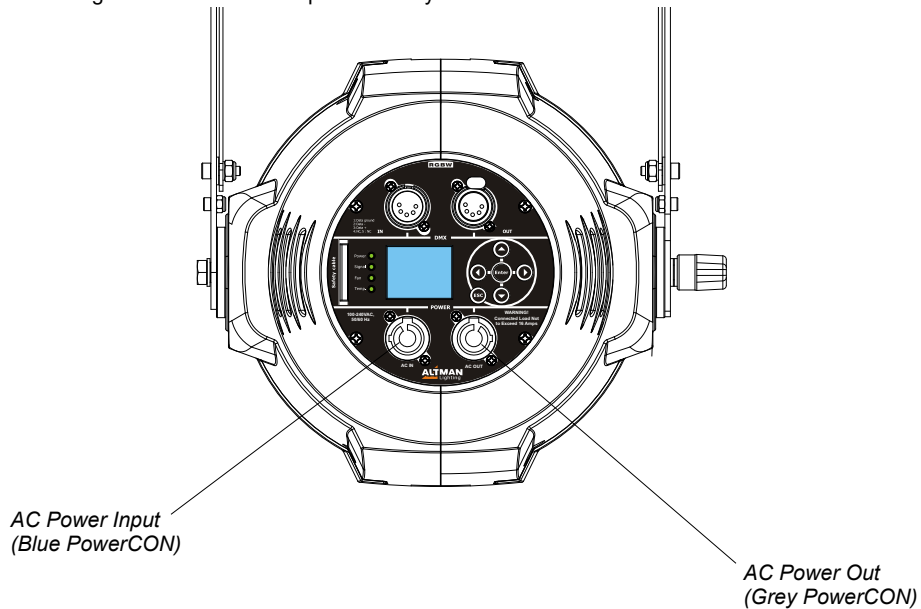


Figure 2: AP-150-RGBW Par Luminaire Rear Panel

Daisy-Chaining Units

When daisy-chaining units, do not exceed the number of units as shown in **Table 2**. Also, please make sure you have read and understood the warnings contained in this section of the document ("**Power Connection Warnings**" on **page 3**.)

Table 2: Daisy-Chaining PRODUCT MODEL NUMBER Luminaires

Voltage	Maximum Number of Units
120VAC	9
230VAC	14

For available luminaire to luminaire interconnect power cable, refer to the product specification sheet location on the Altman Lighting website at www.altmanlighting.com.

Connecting to the DMX512 Network

The AP-150-RGBW Par Luminaire offers two DMX512 connections. One for DMX Input (from a DMX source) and one DMX throughput (out). Basic DMX512 installation consists of connecting multiple DMX controlled AP-150-RGBW Par Luminaire together (up to 32 Total devices per DMX string) in "daisy-chain" fashion. A cable runs from the DMX512 control source to the DMX INPUT connection on the first luminaire. From the DMX OUTPUT of the luminaire another cable runs to the DMX IN connector on the next luminaire (or DMX512 device to be controlled).



IMPORTANT! At the end of each DMX Daisy chain, it is highly recommended that a DMX TERMINATOR (Altman Lighting part number DMX-5-TERM) is installed on the last luminaire (or device) in the chain.

For more information on installing DMX512 control systems, the following publication is available for purchase from the United States Institute for Theatre Technology (USITT), "Recommended Practice for DMX512: A Guide for Users and Installers, 2nd edition" (ISBN: 9780955703522). USITT Contact Information: www.usitt.org

DMX - XLR Connectors

Table 3 shows the pin outs and corresponding DMX signals for a 5-pin XLR connectors.

Table 3: DMX RJ45 & XLR Connector Wiring

DMX XLR Connectors Pin Out	
DMX Signal	Pin
Common (Drain)	Pin 1
DMX -	Pin 2
DMX +	Pin 3

Note: * Only those pins shown are used. Remaining pins are not used.

MENU SYSTEM



IMPORTANT! This section provides basic information regarding the AP-150-RGBW Par Luminaire's menu system. For detailed information on the menu system and settings, please visit the AP-150-RGBW Par Luminaire page on the Altman Lighting web site at www.altmanlighting.com or scan the QR code on the first page of these instructions.

Menu Overview

The AP-150-RGBW Par Luminaire has an on-board menu system that allow users to set up the luminaire for standalone operation, control via DMX, or control a variety of luminaire features. This section will cover the on-board menu system.

Figure 3 shows the on-board menu system user interface.

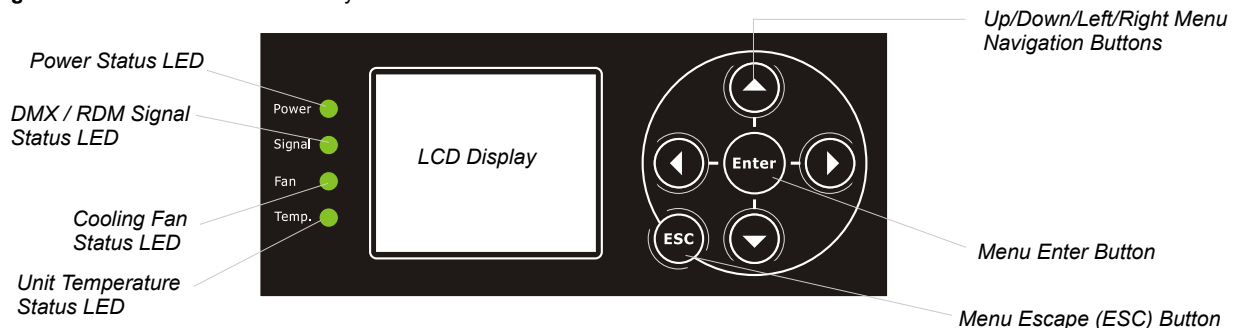


Figure 3: Menu System and Status Indicators

Menu System Features

Status LED Indicators

To the left of the luminaire LCD display are four (4) LED indicator lights for quick status information of the luminaire. Table 4 on page 6 outlines the LED status indicators (as illustrated in Figure 3) and their meaning.

Table 4: Luminaire Status LED Indicators

LED	Meaning	Operational Status
Power	Luminaire's power status	<ul style="list-style-type: none"> Green LED: constant on - indicates proper power to the luminaire. Green LED: flashing - Indicates Power Limit is set to a value less than 100%. Or, luminaire is "power throttling" due to current fan settings. Note: when the fan is locked on at a specific level the luminaire will lower its output to compensate for the locked fan setting. LED Off: Unit is not powered or connected to power.
Signal	DMX/RDM signal status LED	<ul style="list-style-type: none"> Green LED: constant on - indicates viable DMX512 is being received by the unit. Green LED: flashing - indicates RDM activity. Red LED: constant on -indicates the unit has DMX disabled. LED Off: indicates DMX512 signal is not present.
Fan	Cooling fan operational status	<ul style="list-style-type: none"> Green LED: Normal fan operation mode. Yellow LED: High fan operational mode. Red LED: Fan is not operating.
Temp	Luminaire's current temperature status	<ul style="list-style-type: none"> Green LED: Normal operation mode (within normal operational temperature). Yellow LED: Temperature is on the threshold of going above the limit (40 degrees C / 104 degrees F). Red LED: Luminaire is over operational limit temperature. The luminaire should be powered off and allowed to cool.

Note: The intensity of the status LED indicators will dim with the back light of the LCD display.

Setting DMX Address from the Home Screen

In the Home screen the DMX address can be set as follows.

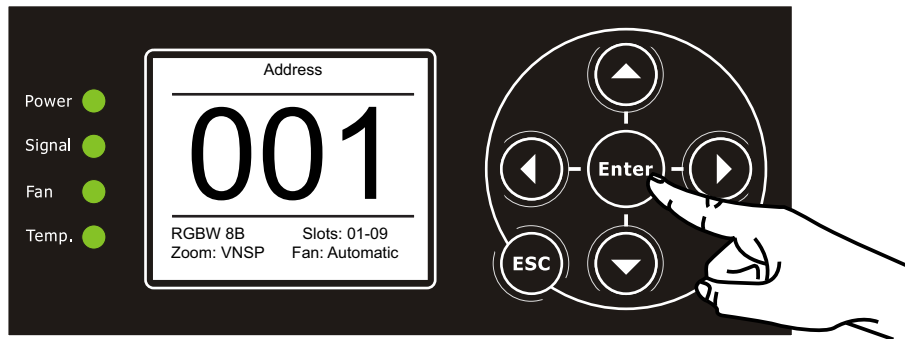


Figure 4: Setting DMX Address

Setting DMX address from home screen:

- Step 1. Unit must be powered.
- Step 2. Press Enter button.
- Step 3. Using UP and DOWN Arrow buttons, increment or decrement DMX address between 001 and 512.



IMPORTANT! Note the number of slots that the luminaire is using in order to avoid a DMX address overrun or DMX overlap with other luminaires in the chain.

- Step 4. Once desired address is set, press the Enter button to confirm. *Note, the numbers will change color from Blue to White confirming the setting. While in the home screen pressing any of the arrow keys will display each channels output for quick reference.*



IMPORTANT! For detailed information on the menu system and settings, please visit the AP-150-RGBW Par Luminaire page on the Altman Lighting web site at www.altmanlighting.com or scan the QR code on the first page of these instructions.