



ALTMAN
LIGHTING



SS-UV40 SPECTRA SERIES UV LED

Preface

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

SS-UV40 SPECTRA SERIES UV LED

Additional product information can be found on our web site at www.altmanlighting.com or by scanning the QR code to the right.



Have a question regarding this manual?

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Should you have a suggestion or question regarding your Altman Lighting product, we would love to hear from you.

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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.

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SS-UV40 Luminaire Installation & User's Manual
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Important Information

Product Safety Notices



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

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. Do not mount near gas or electric heaters.
3. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
4. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
5. Do not use this equipment for other than intended use.
6. Refer service to qualified personnel.

SAVE THESE INSTRUCTIONS.

Warnings



WARNING: 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. A qualified electrician must perform this installation.

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, an approved 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.

DMX 512 Additional Resources

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:

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315 South Crouse Avenue, Suite 200
Syracuse, NY 13210-1844
Phone: 1.800.938.7488 or 1.315.463.6463
www.usitt.org

Altman Lighting Product Warranty

Warranty Terms

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 FIVE (5) years and One (1) day.

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.

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.

Warranty Service

The customer must receive a Return Material Authorization (RMA) number prior to return, return shipment must be visibly marked with the RMA number and the product must be returned (shipping prepaid) to the factory at:

1400 East. 66th Avenue
Denver, CO 80229 USA
+1-303-500-7072
support@altmanlighting.com

The return must be within THIRTY (30) days of receiving the RMA from Altman. Altman warrants for NINETY (90) days any spare part it manufactures. On spare parts or products Altman does not manufacture, such as lamps, sockets, lenses, roundels, electronics, ignitors, ballasts, etc. Altman will grant the same warranty given Altman by its vendors.

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Product Overview

Description

The SS-UV40 LED is comprised of an array of IP65 rated ultraviolet lighting extrusion modules coupled to an IP65 enclosure with a water resistant power supply cord and male and female DMX-512 data supply cords. The overall construction of the fixture includes corrosion protected aluminum housing and includes mounting brackets. All brackets on the LED module can be removed and repositioned if required.

The outdoor power and control box is a powder painted steel enclosure with a gasket hinged cover and mounting brackets. The mounting brackets can be used with the UV module oriented horizontally or vertically. Individual swivel adjustment of the separate UV modules allows for precise control of beam direction and overall coverage. The fixture is supplied with a state of the art microprocessor-controlled solid-state LED light engine incorporating four 365nm LEDs and an on-board power supply. The LED substrate is coupled to a highly efficient circuit board and convection heat sink cooling system for prolonged life of the LEDs. All components and electrical devices are ETL or UL listed or recognized and most are VDE or TUV approved for CE and RoHS compliance.

The SS-UV40 UV LED light modules are specified with lenses at order. Lenses are not interchangeable and the modules are sealed from the factory.

Components

The SS-UV40 LED includes the following components:

- 4 qty. SS-UV40 extrusion modules
- IP65 rated power and control enclosure box
- Power supply cord with bare end for permanent installation wiring
- DMX input and output with IP65 rated XLR connections
- Installation and Instruction manual
- Mounting brackets

Installation And Setup

Mounting Control Enclosure & Modules

Mounting brackets are provided on the UV LED module for permanent mounting to a wall, floor or ceiling. Use proper length screws or bolts to mount the module in the desired location using all four mounting holes provided on the UV LED module brackets. Note that the brackets can be removed and reoriented for easier access to the mounting holes.

Mounting brackets are also provided on the Electronics power and control box for permanent mounting to a wall, floor or ceiling. For wall mounting, the box should be oriented so that the hinge is on the top for proper access to the control board and for better resistance to water splashing. Use proper length screws or bolts to mount the box in the desired location using all four mounting holes provided on the outdoor enclosure.

Connecting Power & Power Requirements



CAUTION - The power & control enclosure must be wired to a grounded source of power connected to a GFCI circuit breaker for outdoor installations.



CAUTION - Do not use the SS-UV40 on a dimmable circuit.

The SS-UV40 requires 45 watts of power at 120VAC. The fixture is supplied with bare-end power cable is ready for wiring to permanently installed junctions or can be wired to plugs for temporary use.

Connecting Data

Connect DMX signal to the fixture using the XLR connections. The DMX signals can be daisy chained from one enclosure to an adjacent enclosure each with separate connections to a power source.

Access the control board by loosening the three brackets securing the top cover.

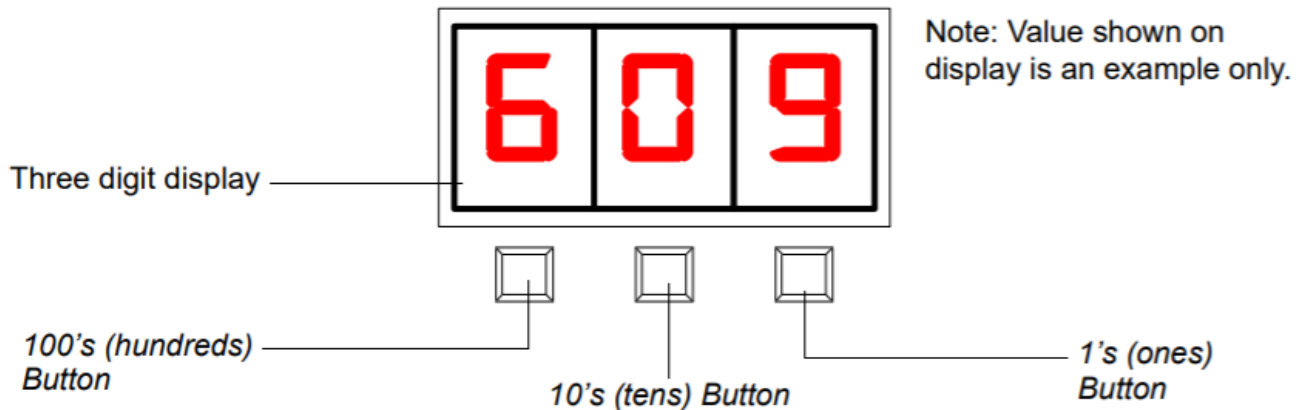
Focusing

With the fixture energized and Data connected, point the unit in the direction of the object to be irradiated by loosening the two screws at either end of the UV LED modules. Adjust the UV LED module to the desired position and secure the fixture by tightening the two screw to lock down the UV LED light module.

Operation

Settings

Spectra Series Products offer three (3) buttons to program the fixture. All settings for Modes, DMX address, and Personalities can be made by using the three buttons on the back of the unit while power is on. To activate the three digit display, press any of the three button. After 4 seconds of inactivity, the display will go blank.



All settings can be made by using the three buttons on the back of the unit while power is on. These include:

- DMX Address
- Fixture Personalities
- Stand-Alone Effects
- Local Channel Control
- Lock the Fixture (from unwanted changes after programming)
- Master Control Mode

Modes

DMX MODE

This mode is used for setting

- DMX address
- Personalities
- Stand-Alone Effects

STAND ALONE MODE

This mode is used for setting the fixture to a desired intensity.

While in stand-alone mode, the hundreds button cycles through 'r', 'G', 'b', and 'A' colors. (r = UV1; G = N/A; b = N/A; A = N/A). The tens and ones digits select 0-99 values. 99 is actually full. The 0-255 scale is spread

evenly over the 0-99 display range.

NOTE: When entering or exiting fixed intensity mode, the display will go blank. Touch any button to turn on display.

LOCKED MODE

To Lock (or unlock) the buttons:

1. Wait a few seconds until the display goes blank,
2. Press and hold the [ONES] button
3. Press and hold the [HUNDREDS] button
4. Release the [ONES] button
5. Release the [HUNDREDS] button.

Display will show **Loc** for a moment and then blink.
Buttons will have no effect until they are unlocked.

PRIMARY & REPLICA MODE

To Turn On (or Off) the PRIMARY:

1. Wait a few seconds until the display goes blank,
2. Press and hold the [HUNDREDS] button
3. Press and hold the [ONES] button
4. Release the [HUNDREDS] button
5. Release the [ONES] button.

PERSONALITIES

A total of 8 personalities are available. Each personality is made up of 3 settings: RESOLUTION (8 Bit /16 Bit), MASTER (On /Off), and SMOOTHING (On/Off). These are displayed in the chart below.

The current active Personality # is displayed for about 1 second during power up. The format is Pxx where xx is replaced by the active personality #01-08. To set the desired Personality, the fixture must be in DMX mode.

To select the personality:

Press the buttons until the desired personality address 601-608) appears in the display (see list below).

Wait a few seconds, and a confirmation display will appear that shows a question mark? on the left, followed by the personality #. This gives you an opportunity to either accept or reject the new setting.

To accept the personality, press the [ONES] button.

To reject the personality, press the [HUNDREDS] button.

Once the new personality is accepted, it is entered into memory and retained even if power is disconnected.

Once personality is either accepted or rejected, the display will go back to the current DMX address. The default personality for a new unit is #02.

EXAMPLE: To select personality #05, enter 605 on the display.

After a few seconds the display will show? 05. To confirm, press the [ONES] button (below the 5), personality #05 is now entered into memory.

PERSONALITY ADDRESS SETTINGS LIST (601-608) 4-COLOR CHANNELS:

601 = Personality #01 8 Bit , Master OFF, Smoothing OFF
4 DMX channels. Channel order is UV1, UV2, UV3, UV4

602 = Personality #02 8 Bit , Master OFF, Smoothing ON
4 DMX channels. Channel order is UV1, UV2, UV3, UV4

603 = Personality #03 8 Bit, Master ON, Smoothing OFF
5 DMX channels. Channel order is UV1, UV2, UV3, UV4, M

604 = Personality #04 8 Bit, Master ON, Smoothing ON
5 DMX channels. Channel order is UV1, UV2, UV3, UV4 M

605 = Personality #05 16 Bit, Master OFF, Smoothing OFF
8 DMX channels. Channel order is UV1 Coarse, UV1 Fine, UV2 Coarse, UV2 Fine, UV3 Coarse, UV4 Fine, UV4 Coarse, UV4 Fine

606 = Personality #06 16 Bit, Master OFF, Smoothing ON
8 DMX channels. Channel order is UV1 Coarse, UV1 Fine, UV2 Coarse, UV2 Fine, UV3 Coarse, UV4 Fine, UV4 Coarse, UV4 Fine

607 = Personality #07 16 Bit, Master ON, Smoothing OFF
10 DMX channels. Channel order is UV1 Coarse, UV1 Fine, UV2 Coarse, UV2 Fine, UV3 Coarse, UV4 Fine, UV4 Coarse, UV4 Fine
Master Coarse, Master Fine

608 = Personality #08 16 Bit, Master ON, Smoothing ON
10 DMX channels. Channel order is UV1 Coarse, UV1 Fine, UV2 Coarse, UV2 Fine, UV3 Coarse, UV4 Fine, UV4 Coarse, UV4 Fine
Master Coarse, Master Fine

PERSONALITY ADDRESS SETTINGS LIST (609-612) 1-COLOR CHANNELS:

609 = Personality #09 8 Bit, Smoothing OFF
(uses 1 DMX channel)

610 = Personality #10 8 Bit, Smoothing ON
(uses 1 DMX channel)

611 = Personality #11 16 Bit, Smoothing OFF
(uses 1 DMX channel)

612 = Personality #12
(uses 1 DMX channel)

16 Bit,

Smoothing ON

RESOLUTION is selectable as either:

- 8 Bit (one DMX channel per color) this is normal resolution,
- 16 Bit (two DMX channels per color Coarse+Fine high resolution similar to moving lights).

SMOOTHING is selectable as ON or OFF and provides a smooth transition ramp from one level to another in a similar way to how an incandescent lamp behaves. This helps to eliminate the “steppiness” associated with LED fixtures that is caused by the instantaneous response of LEDs.

Stand-Alone Effects

This feature will operate the UV40 without the need for a separate control console.

Note: stand-alone effects from a single unit will control other units connected via DMX cable to all synchronize. Set other units to DMX Channel 001.



CAUTION - Unless the Primary and Replica mode has been disabled, use of the SS-UV40 Stand-Alone Effects feature while connected to a control console will result in a conflict. See instructions below.

UV Fades (700-799):

700 - 709 = 1>4>2>3 fade

740 - 749 = 3>2>4>1 fade

780 - 789 = 1>4>2>3>A fade

790 - 799 = A>3>2>4>1 fade

700 = faster 709 = slower

740 = faster 749 = slower

780 = faster 789 = slower

790 = faster 799 = slower

Key:

1 = UV1 - UV LED Module One

2 = N/A - Not Available or Dark.

3 = N/A - Not Available or Dark.

4 = N/A - Not Available or Dark.

A = LED Module UV will activate.

UV Strobes (800-879):

800 - 809 = ALL STROBE

810 - 819 = 1 STROBE

820 - 829 = (Reserved)

830 - 839 = 2 STROBE

840 - 849 = 3 STROBE

850 - 858 = 1-4-2-3 RAINBOW STROBE

870 - 879 = 3-2-4-1 RAINBOW STROBE

800 = faster 809 = slower

810 = faster 819 = slower

820 = faster 829 = slower

830 = faster 839 = slower

840 = faster 849 = slower

850 = faster 859 = slower

870 = faster 879 = slower

Stand-Alone Intensity

While in stand-alone mode, the hundreds button cycles through each pod. (r = UV1; G = UV2; b = UV3; A = UV4). The tens and ones digits select 0-99 values. 99 is actually full. The 0-255 scale is spread evenly over the 0-99 display range.

NOTE: When entering or exiting fixed intensity mode, the display will go blank. Touch any button to turn on display.

Cleaning And Care

Cleaning

Routine cleaning of the SS-UV40 lighting fixture will provide years of prolonged use. Use a vacuum to remove any dust and dirt from the lens, electronics and heat sink. For the lens, use a soft lint-free cloth dampened with water to clean the lens of dust and dirt. Dry off completely with compressed air or a dry lint free cloth.

Do not use cleaning agents that are reactive to UV light on the lenses. Doing so will risk lens cataract and void the warranty.