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ALTMAN STAGE LIGHTING CO., INC.

# **OPERATION**

## Set-up

Unpack the stand and lamphouse from their shipping cases and check for any concealed damage.

Stand Assembly: The stand is shipped in three (3) parts. They are the caster base, the support column and the yoke. They are assembled by placing the support column into the base and securing it by tightening the collar clamp handle (see ©). The yoke is then mounted on top of the column with the fan cutout forward and secured by tightening its collar clamp handles. The height of the column can be adjusted by loosening the center column clamp handle, raising the center column to the desired height and then retightening the clamp. Place the yoke in a level position and lock in place.

Lamphouse assembly: Place the lamphouse into the yoke, aligning the captive mounting bolts in the yoke with the threaded studs in the lamphouse (see (2)). Tighten the four mounting bolts to secure the lamphouse onto the yoke. This must be done with care, so as not to damage the fan lead on bottom of lamphouse. Place the spotlight at its operating position and lock the casters, then raise the stand off the casters by turning the leveling jacks to prevent unwanted movement. Check the height of the lamphouse to insure that it clears any obstacles during its operation and if necessary again adjust the height of the mounting column. Position ballast next to lamphouse, plug 5 wire cord into recessed receptacle located in lamphouse and into 5 wire receptacle located in face of the ballast. Place ballast power correction switch in center position.

Connect the power cord by inserting into any 60 hertz, 120 Volt, parallel blade U-ground receptacle which can supply the required 7 amps of current.

DO NOT OPERATE THIS UNIT ON A DIMMABLE CIRCUIT

### **Ballast**

The ballast for the SATELLITE is supplied with a variable tap on the front face. Under normal operation, this tap should be placed in the center position. If two or more SATELLITES are to be operated in the same location these taps may be used to adjust for variations in line loss due to differences in cable runs. Move tap to the left if voltage is high and to the right if voltage is low. Always operate the ballast on a properly grounded receptacle. An integral circuit breaker is located adjacent to the voltage tap. If the circuit breaker is tripped correct fault prior to resetting circuit breaker.

# Lamp Start-up

There are two (2) switches used to ignite the HMI-575w arc lamp used in this spotlight. The rear switch turns on the fans used to cool the lamp and color filters. These fans must be operating in order for the

lamp to be operated. If the fans do not operate check power source. The forward momentary contact switch turns on the lamp and about one minute of warm-up time is required for the lamp to reach full output. To start lamp press ignitor button (see (39)). Do not hold button down for prolonged periods.

If lamp fails to ignite, wait five seconds and press again. If lamp does not ignite after several tries, see trouble shooting section. If the power line is interrupted or rear fan switch is turned off the lamp will extinguish. The lamp can be re-ignited at any point of cooling by turning on the power switch and pressing ignition button.

Unlock the tilt handle, and the spotlight is ready for operation.

# **Focusing**

The SATELLITE I is shipped with a ten inch (10") lens mounted in the front casting and a four and one half inch) ( $4\frac{1}{2}$ ") located between the iris and dimmer. Focus and beam diameter are determined by the relationship of front and back lenses. The front lens control handle (see 2) is forward in Spot and back for Flood. The rear lens control handle (see 3) is back for Spot and forward for Flood. First adjust the front lens to desired beam diameter and then adjust the rear lens to achieve a sharp or soft edge as desired. A zoom range of 7.33° to 20° is possible with these two adjustments.

### Iris

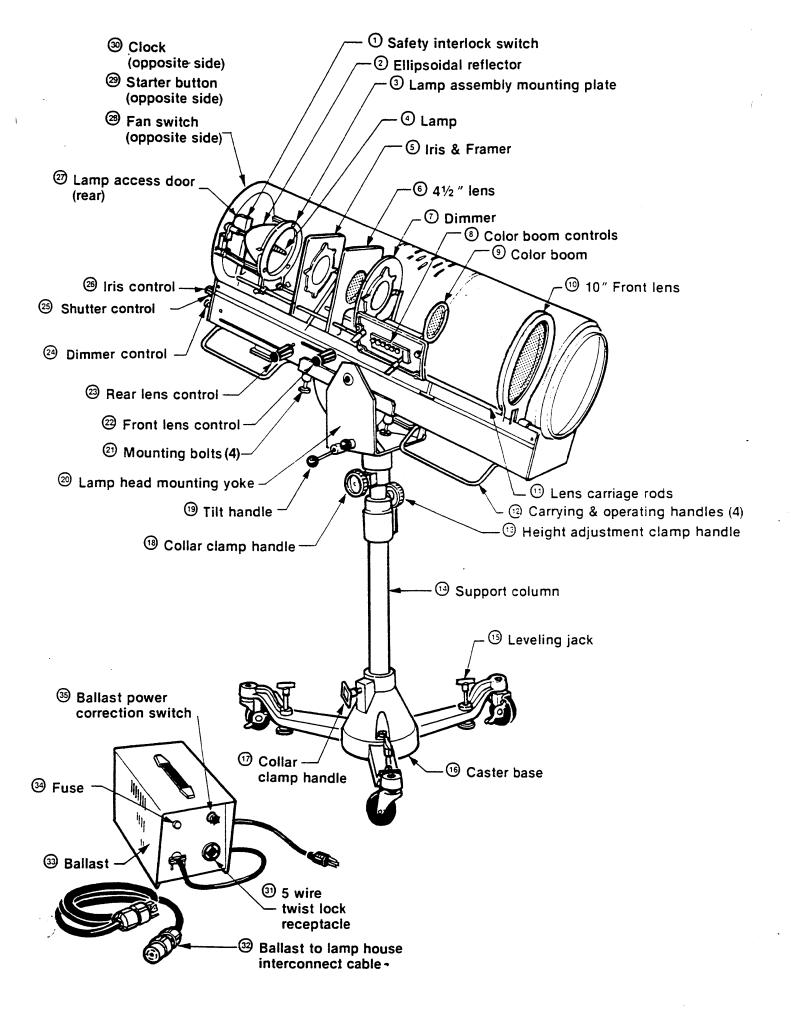
Once the beam diameter is determined by lens adjustment the beam size may be further reduced by adjusting the iris size. Turn iris control handle (see (39)) counter-clockwise for smaller diameter and clockwise for larger diameter.

### Shutter

The shutter control handle is located outside the rear of the spotlight along with the iris control handle. Turn shutter control counter-clockwise to close and clockwise to open. This shutter is used to square-off the top and bottom of the beam and is used primarily in the flood position to limit the height of the beam as its width is expanded.

### Dimmer Control

A dimmer control lever is located on the rear of the spotlight next to the iris control (see (3)). As this lever is rotated clockwise the dimmer closes and reduces the intensity of the spotlight. This change in intensity does not affect beam diameter.



### Color Boom

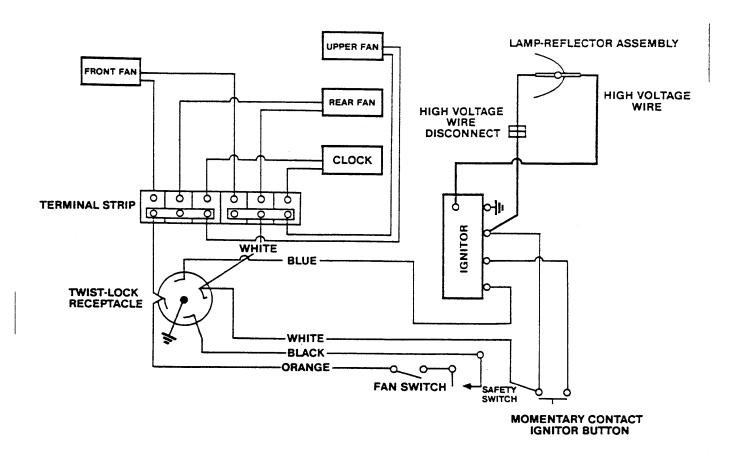
The color boom is located in the center of the right side of the spotlight. It is supplied with six (6) heat resisting color filters and a black-out dowser. Push the desired handle down to lift a color filter into the beam and this will automatically remove any other color filter from the beam. The upper white handle, when pushed down, removes all color from the beam. To mix two colors hold both handles down in the locking position until the spring loaded latch engages.

### Lens Cleaning

During normal use of the ALTMAN SATELLITE I SPOTLIGHT, the lenses will collect a dirty film and

should be cleaned. Cleaning can best be accomplished with soap and water or other glass cleaning solutions. CARE should be taken that the cleaning process does not leave a film on the lens (especially the  $4\frac{1}{2}$ " rear focusing lens) since the heat of the beam will bond this film onto the surface. The lens cleaning can be accomplished with the lenses mounted in the spotlight or they can be removed for ease of cleaning. All lenses should be mounted in the unit with their curved surface forward.

Should you have any further questions, or require technical information or need a replacement part, please contact your AUTHORIZED DEALER or contact ALTMAN STAGE LIGHTING directly.



SATELLITE 1

LAMP HOUSE SCHEMATIC

# **MAINTENANCE**

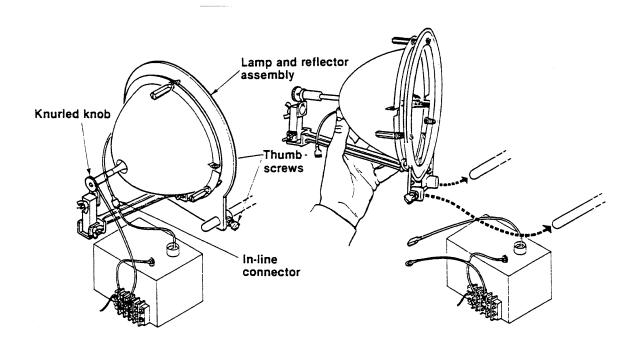
### Lubrication

The ALTMAN SATELLITE I is a relatively maintenance-free device. Like any other precision made system, the best maintenance recommendation is to keep the spotlight clean both inside and out. The lens and lamp carriage rods should occasionally be wiped clean and lightly oiled. Likewise, the pivot points of all mechanical linkages, especially the iris, shutter and dimmer levers should be lightly oiled. CAUTION: Do not oil the leaves of the iris or dimmer. If lubrication is required, sparingly apply graphite or "ARC LUBE" only.

### Color Boom

The SATELLITE I is supplied with (6) heat resistant color filters. During normal operation, this color will gradually fade, and must be replaced with a similar

color filter available from your authorized ALTMAN DEALER. To remove the color boom, remove the four thumbscrews located at the corners of the color boom plate. While pulling the entire color boom towards you, rotate the plate 90 degrees so that the filters are parallel to the lens carriage rods and continue to lift out until the filter holders clear the lamphouse. The color boom is then free to lift up and out of the spotlight. To remove the color filters, lift the brass staples and remove the color filter retaining ring. The ring can be used as a template to cut the new filter. When installing the new color filter, make sure that the brass staples are bent over and lay flat against the holder to stop them from catching on adjacent filter holders. When installing the color boom into the spotlight make sure that the white cancelling handle is towards the rear of the spotlight.



# Lamp Replacement

DANGER: DO NOT OPERATE THE LAMP WITH REAR DOOR OPEN, LAMPHOUSE COVERS REMOVED, OR INTERLOCK SWITCH DEFEATED AS THE LAMP PRODUCES POTENTIALLY HAZARDOUS ULTRA-VIOLET EMISSIONS. AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION.

<u>CAUTION!</u> ALL POWER SHOULD BE DISCONNECTED BEFORE DOOR IS OPENED TO GAIN ACCESS FOR LAMP REMOVAL.

CAUTION! STARTING VOLTAGE PULSE FROM IGNITOR TO LAMP IS 30 K.V.

Access to the HMI-575w lamp is obtained by opening the rear access cover door held by a captive thumb

screw which is unfastened by rotating counterclockwise. To remove lamp open the rear access door of the housing, disconnect the lead to the rear of the lamp by loosening the knurled knob and the lead to the front of the lamp by disconnecting the in-line connector. Loosen the two thumbscrews at the bottom of the support plate and slide the reflector and lamp assembly toward the rear until it is free. Under no circumstances should you attempt to remove the lamp from the reflector assembly. The lamp and reflector assembly is prefocused at the factory for optimum performance. Return the entire assembly to your ALTMAN SATELLITE DEALER. To install new lamp assembly, reverse the above process. A time clock is located at the rear of the unit to indicate the hours of lamp operation. Record this time when installing a new lamp.

# TROUBLESHOOTING

# Lamp Failure

If the lamp fails to start, check the exterior power connections and the fan switch to see if it is in the on position. If the power is connected, and the fan switch is on, fan noise and air movement is easily detected.

This means you have voltage. This does not mean you have 120V., as the fans will operate on 50V., but at a much lower speed. Always check for proper AC input voltage. If power is available, the following problems may account for the lamp's failure to operate.

Symptom	Causes	Remedies
A) Lamp will not start/ but pulse is present in lamp	<ol> <li>Expired or defective lamp</li> <li>Bad connection in wiring or short circuit</li> <li>Ballast failure</li> <li>Unit not getting proper AC input voltage</li> </ol>	<ol> <li>Replace lamp</li> <li>Repair connector or replace wiring</li> <li>Replace ballast</li> <li>Check input voltage</li> </ol>
B) Lamp will not start and no starting pulse in lamp	<ol> <li>Circuit breaker tripped</li> <li>Bad connection/short</li> <li>Damaged lamp switch</li> <li>Ballast failure</li> <li>Ignitor failure</li> <li>Damaged lamp</li> <li>Not getting proper input</li> </ol>	<ol> <li>Reset circuit breaker, if breaker trips again, locate cause</li> <li>Repair connections or replace wiring</li> <li>Replace switch (momentary)</li> <li>Replace ballast</li> <li>Replace ignitor</li> <li>Replace lamp</li> <li>Check AC input</li> </ol>
C) Lamp light output is low	1 - Damaged lamp 2 - Ballast failure	1 - Replace lamp 2 - Replace ballast
D) Visible flicker	1 - Damaged lamp 2 - Ballast failure	1 - Replace lamp 2 - Replace ballast

## Guarantee

The Altman Satellite I Followspot is fully guaranteed to be free from defects in material and workmanship; ballast and ignitor for a period of six (6) months from date of shipment, lamphouse and stand for a period of one (1) year from date of shipment, and lamp life as specified by lamp manufacturer. No returns will be authorized without the written approval of Altman Stage Lighting. No other warranty is expressed or implied.