INSTALLATION INSTRUCTIONS

REMOTE CONTROLLED SURGICAL LIGHT

Argos II  AR24

REMOTE CONTROLLED SURGICAL LIGHT
ATTENTION, CONSULT MANUAL FOR FURTHER INSTRUCTIONS. INDICATES SPECIAL USER ATTENTION.

AC VOLTAGE

FUSE TYPE 3 AMP, SLOW BLOW TYPE

FUSE TYPE 5 AMP, SLOW BLOW TYPE

CLASS I, IPX0 RATED, CONTINUOUS OPERATION

WARNING

This equipment is intended for use by healthcare professionals only. The Positioning Wand may cause radio interference or may disrupt the operation of nearby equipment. It may be necessary to take mitigation measures, such as using the wall control for positioning only.

PERMISSIBLE ENVIRONMENTAL CONDITIONS

DURING TRANSPORT AND STORAGE (IN ORIGINAL PACKAGING MATERIALS)
- AMBIENT TEMPERATURE: -10° - 60° C (14° - 140° F)
- RELATIVE AIR MOISTURE: 10% - 85%, NO CONDENSATE BUILD-UP
- AIR PRESSURE: 500 hPa - 1060 hPa (14 in-Hg - 31 in-Hg)

DURING USE - FOR DRY LOCATIONS
- AMBIENT TEMPERATURE: 15° - 30° C (60° - 85° F)
- RELATIVE AIR MOISTURE: 30% - 60% NON CONDENSING
- AIR PRESSURE: 700hPa - 1060 hPa (20.7 in-Hg - 31.3 in-Hg)
The lighthead Data Labels contain the lighthead model number, bulb type, fuse type, electrical specifications and product serial number.

**LIGHTHEAD LABEL**

**AR24**

**INPUT**

**BULBS TYPE**

**SERIAL NO.**

---

**WALL CONTROL LABEL**

**DUAL FIXTURE**

**QUAD FIXTURE**

**INPUT**

**OUTPUT**

**FUSE**

**SERIAL NO.**

---

**LIGHTHEAD LABEL**

**AR24**

**INPUT**

**BULBS TYPE**

**SERIAL NO.**

---

**WALL CONTROL LABEL**

**INPUT**

**OUTPUT**

**FUSE**

**SERIAL NO.**

Manufactured for SKYTRON by DAI-ICHI SHOMEI CO., LTD. TOKYO, JAPAN
1. 1/2" Diameter support rod centered in fixture opening for total support of light. All labor and materials for fabrication, 1/2" nuts and washers (2 each required) for fixture attachment, contractor supplied.

2. All wiring, conduit, and other electrical materials as well as installation labor for such materials associated with the installation of the SKYTRON light fixture to be provided by electrical contractor. All installations of SKYTRON lighting fixtures should be under the direct supervision of a SKYTRON service representative.

3. All wiring to be in accordance with local codes. 120 VAC, 20A Dedicated Circuit.

4. Wall Control measures 4-1/2" deep, 7-3/4" x 7-3/4".

5. Wall Control to Light Head wiring requires 5 color coded 14AWG wires to each lighthouse.
WARNING

Pay close attention to wiring diagrams and wire color coding. Incorrect wiring may result in High Voltage (120VAC) being supplied to Low Voltage circuits. This WILL DAMAGE internal circuitry and components VOIDING WARRANTY.
INSTALLATION CLEARANCES

To prevent damage to the light fixture the following minimum clearances must be maintained:

1. Centers of adjacent (two or more) fixtures: 3 feet
2. Top of fixture and overhead building member: 5 inches.
3. Fixture center to side wall: 1-1/2 feet.

⚠️ WARNING

Risk of FIRE. DO NOT install insulation within 3 inches of fixture sides nor above fixture in such a manner to entrap heat.

PRE INSTALLATION REQUIREMENTS

1. Appropriate metal conduit & wiring installed from wall control mount to ceiling mounting structure.
2. 1/2" diameter support rod centered in fixture opening. See Mounting Guideline.
3. 120VAC, 20amp dedicated power supply line in separate conduit to be provided at wall control.
4. Painting and flooring must be complete prior to fixture installation.

INSTALLATION INSTRUCTIONS

1. Set the fixture on a flat surface and loosen the two 1/4 turn screws on the cover and remove the cover. See figure 1.
2. Loosen the 1/4 turn screw securing the light assembly to the housing and lift the edge of the assembly. See figure 2.
3. Release the spring pins, disconnect the electrical connector and remove the assembly from the housing. See figure 3. Set the light assembly aside being careful not to contact the photo eyes.

NOTE

Failure to follow mounting structure guidelines may result in poor performance.
4. Check mounting structure details (on back page) and install housing onto threaded rod.

**NOTE**
Threaded rod must not extend more than 1 inch inside housing to prevent interference with light assembly movement.

5. Align lighthead housing front cover screws as shown in figure 4 for proper lighthead/wall control orientation.

6. Connect the 5 color coded wires from the wall control box (through conduit) to the lighthead housing junction box as shown in the wiring diagrams. Observe wire colors carefully and make all wire connections using wire nuts.

7. Remove the shipping retainer (figure 5), install the wiring connector, reinstall the lighthead assembly in the housing and secure with the 1/4 turn screw.

8. During the installation process, the Argos II can be configured to provide additional degrees of articulation for low angle lighting. This can be accomplished by positioning the Retainer Plate into the appropriate position within the housing/enclosure. See figure 6.

---

**Figure 4. Lighthead Orientation**

**Figure 5.**

**Figure 6.**
9. Observe wire color codes and connect wires from light fixture to wall control wires using wire nuts. See Wiring Diagrams.

**CAUTION**
Use 14 AWG wire MINIMUM. Make all wire connections with wire nuts.

10. Install wall control panel. Refer to figure 7, mounting guideline (page 3) and wiring diagrams.

**NOTE**
To ensure proper performance use Skytron supplied bulbs ONLY. P.N. B5-011-32.

**CAUTION**
Fixture has a thermal protection device. Blinking light may indicate heat build-up due to improper installation clearances.

- **NOTE**
Depending on length of 1/2 inch threaded rod and finish ceiling construction, some fixture movement may be noticed during operation. If so, shims may need to be added between finished ceiling and housing to prevent side movement of the fixture.
A dedicated circuit with a 20A Circuit Breaker is required for proper operation.
A dedicated circuit with a 20A Circuit Breaker is required for proper operation.
AR24 EYE ADJUSTMENT PROCEDURE

Light needs adjustment when:

A) Light searches from side to side
B) Light does not focus on the spot where the probe is placed

NOTE
Before adjusting the light, make sure your probe is charged.

1. Place electrical tape over the three eyes as shown in Figure AB. The remaining eye will only adjust for the light in the “A” direction.

2. Place your hand behind the probe bulb, at the usable distance in that room (approximately 6’8”). Move the probe in the “A” direction. If the light moves past or stops before the probe, only then, should that eye be adjusted.

3. If the spot moves past the probe (spot “A”), move the eye in the “A” direction. This will bring the light back to the probe. If the spot stops short of the probe (spot “B”), move the eye in the “B” direction.

CAUTION
This adjustment is VERY DELICATE and only needs to be moved LESS THAN 2MM. The handle of a screwdriver will work fine with a LIGHT touch. Tap on the eye in the direction needed, recheck the location of the spot as in step #3. The adjustment is complete when the light spot stops at the probe.

4. The eye directly across must be adjusted next, Figure CD. Remove the tape from the eye directly across from the eye previously adjusted and place it on the adjusted eye. The same steps should be taken as in steps 2 and 3. If the light moves past the probe (spot “C”), move the eye in the “C” direction to bring the spot back to the probe. If the spot stops short of the probe (spot “D”), move the eye in the “D” direction.

5. Remove the tape from “A” and “B” eyes and check the adjustment from side to side. If the light wants to wander, tap either “A” or “B” out away from the center of the light (less than 2mm).
Use the same adjustment procedure in steps 2 through 5 to adjust eyes “EF” and “GH”. Refer to Figures EF and GH.

If further assistance is needed, contact a SKYTRON Service Representative.
<table>
<thead>
<tr>
<th>INSTALLATION CHECK LIST</th>
<th>CK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIGHTS</strong></td>
<td></td>
</tr>
<tr>
<td>Make sure light follows Probe at 8'</td>
<td></td>
</tr>
<tr>
<td>Check for searching - adjust eyes as necessary</td>
<td></td>
</tr>
<tr>
<td>Check hinges on front cover</td>
<td></td>
</tr>
<tr>
<td>Remove shipping materials, Gimble retaining brackets</td>
<td></td>
</tr>
<tr>
<td>Clean filter/diffuser assembly</td>
<td></td>
</tr>
<tr>
<td>Ensure proper orientation of LH within room</td>
<td></td>
</tr>
<tr>
<td>Ensure that there are no obstructions that limit travel</td>
<td></td>
</tr>
<tr>
<td><strong>WALL CONTROL</strong></td>
<td></td>
</tr>
<tr>
<td>Properly oriented</td>
<td></td>
</tr>
<tr>
<td>Test for proper function</td>
<td></td>
</tr>
<tr>
<td>Check fuse holder</td>
<td></td>
</tr>
<tr>
<td>Check operational &amp; warning labels</td>
<td></td>
</tr>
<tr>
<td><strong>PROBE</strong></td>
<td>NA</td>
</tr>
<tr>
<td>Wall mounted</td>
<td></td>
</tr>
<tr>
<td>Check plastic casing for damage</td>
<td></td>
</tr>
<tr>
<td>Check operational &amp; warning labels</td>
<td></td>
</tr>
<tr>
<td>Check probe on/off function</td>
<td></td>
</tr>
</tbody>
</table>
DAMAGED SHIPMENT CLAIM PROCEDURE

Whenever a shipment suffers damage while in the custody of the transportation company, the responsibility lies with the transportation company, and the value of the damages can be collected from the transportation company if the proper procedures are followed.

When a shipment is received in a damaged condition and due to the appearance of the containers such as a broken crate, torn wrapping, or smashed carton, the contents may have been damaged. That fact should be noted on the Bill of Lading offered by the transportation company. An example of an applicable statement would be; "Received in good order except as noted" or "Crate damaged, possibility of concealed damage." The addition of these types of statements on the shipping documents will automatically give grounds for starting a claim.

If damage cannot be identified on the exterior of the container, but is found when the container is opened, further unpacking should be stopped immediately and the container with all wrapping or packing materials should be held. The transportation company should be notified so an inspector can be sent. Failure to follow either of these two procedures may result in an inability to file a claim and collect for damage done. Returning the container to the sender without such an inspection may prevent filing a claim, because it will divide the responsibility for damage and in many cases the transportation company will return the shipment to the sender without charge after the inspection.

The claim itself may be filed by either the shipper or consignee, but the consignee must notify the transportation company and the shipper that the damage has occurred. Remember that refusal of the shipment or failure to note the possibility of damage on the shipping documents may jeopardize the claim. Also, acceptance of a damaged shipment which has been processed properly to allow for filing a claim, will not jeopardize the position of the consignee. In any case, SKYTRON will see that damage which is not the fault of the consignee or his agents is corrected, if the transportation company does not honor the claim, as long as SKYTRON receives the full cooperation of the consignee in filing the claim.

Some of the papers needed for filing a claim are in the hands of the consignee after the shipment has been received. If SKYTRON must file a claim, we will request these papers by name from the consignee at such time as the claim is under discussion. We will require the originals of these papers and not copies.

Knowledge of the procedures outlined above and your cooperation in submitting damaged shipment claims will help both you, our customer, and SKYTRON by assuring the integrity of our products from manufacturing to installation.