CLARITY LED
IMPORTANT SAFETY INSTRUCTIONS

• To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.

• Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.

• Installation and service of luminaires should be performed by a qualified licensed electrician.

• Maintenance of the luminaires should be performed by person(s) familiar with the luminaires’ construction and operation and any hazards involved. Regular fixture maintenance programs are recommended.

• It will occasionally be necessary to clean the outside of the refractor/lens. Frequency of cleaning will depend on ambient dirt level and minimum light output which is acceptable to user. Refractor/lens should be washed in a solution of warm water and any mild, non-abrasive household detergent, rinsed with clean water and wiped dry. Should optical assembly become dirty on the inside, wipe refractor/lens and clean in above manner, replacing damaged gaskets as necessary.

• DO NOT INSTALL DAMAGED PRODUCT! This luminaire has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.

• These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser’s or owner’s purposes, this matter should be referred to Modular Services Company.

<table>
<thead>
<tr>
<th>WARNING</th>
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<tbody>
<tr>
<td>RISK OF ELECTRIC SHOCK</td>
<td>RISK OF BURN</td>
</tr>
<tr>
<td>✓ Disconnect or turn off power before installation or servicing.</td>
<td>✓ Allow lamp/fixture to cool before handling. Do not touch hot lens, lamp, guard, or enclosure.</td>
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<tr>
<td>✓ Verify that supply voltage is correct by comparing it with the luminaire label information.</td>
<td>✓ Do not exceed maximum wattage marked on luminaire label.</td>
</tr>
<tr>
<td>✓ Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.</td>
<td>✓ Follow all lamp manufacturer’s warnings, recommendations and restrictions on lamp operation including but not limited to: ballast type, burning position, replacement, and recycling.</td>
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<tr>
<td>✓ All wiring connections should be capped with UL approved recognized wire connectors.</td>
<td>✓ Use only lamps that comply with ANSI standards.</td>
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<td>RISK OF FIRE</td>
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<td>✓ Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.</td>
<td>✓ Keep combustible and other materials that can burn away from lamp/lens.</td>
</tr>
<tr>
<td>✓ Avoid direct eye exposure to the light source while it is on.</td>
<td>✓ Do not operate in close proximity to persons, combustible materials or substances affected by heat or drying.</td>
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Please see product specific installation instructions for additional warnings or any applicable FCC or other regulatory statements.

Failure to follow any of these instructions could void product warranties.
CONTROLS IMPORTANT SAFETY INSTRUCTIONS

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• Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.

• Installation and service should be performed by a qualified licensed electrician.

• Maintenance should be performed by qualified person(s) familiar with the products’ construction and operation and any hazards involved. Regular maintenance programs are recommended.

• **DO NOT INSTALL DAMAGED PRODUCT!** This product has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.

• These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser’s or owner’s purposes, this matter should be referred to Modular Services Company.

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<td>✓ All unused connector openings must be capped.</td>
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<td>✓ Do not exceed maximum wattage, ratings, or published operating conditions of product.</td>
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<td>✓ Do not overload.</td>
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<td>✓ Follow all manufacturer’s warnings, recommendations and restrictions to ensure proper operation of product.</td>
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Always read the fixtures complete installation instructions prior to installation for any additional fixture specific warnings.

Failure to follow any of these instructions could void product warranties.
Electrostatic Discharge (ESD): ESD can damage product(s). Personal grounding equipment must be worn during all installation or servicing of the unit.
Do not touch individual electrical components as this can cause ESD and affect product performance.
Do not stretch or use cable sets that are to short or are of insufficient length.
Do not tamper with contacts.
Do not modify the product.
Do not change or alter internal wiring or installation circuitry.
If installing latching springs: ensure that the springs are fully engaged prior to moving to next connection.
If installing wiring systems: Materials and component parts of a manufacturing wiring system as described in Article 604 of the National Electric Code and Underwriters Laboratories Standard for Safety #183 MUST BE installed.

Please see product specific installation instructions for additional warnings or any applicable FCC or other regulatory statements.

Failure to follow any of these instructions could void product warranties.

**LED IMPORTANT SAFETY INSTRUCTIONS**

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service of luminaires should be performed by a qualified licensed electrician.
- Maintenance of the luminaires should be performed by person(s) familiar with the luminaires’ construction and operation and any hazards involved. Regular fixture maintenance programs are recommended.
- It will occasionally be necessary to clean the outside of the refractor/lens. Frequency of cleaning will depend on ambient dirt level and minimum light output which is acceptable to user. Refractor/lens should be washed in a solution of warm water and any mild, non-abrasive household detergent, rinsed with clean water and wiped dry. Should optical assembly become dirty on the inside, wipe refractor/lens and clean in above manner, replacing damaged gaskets as necessary.
- **DO NOT INSTALL DAMAGED PRODUCT!** This luminaire has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.
- Recycle: For information on how to recycle LED electronic products, please visit www.epa.gov.
- These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser’s or owner’s purposes, this matter should be referred to Modular Services Company.
Never connect components under load.
Do not mount or support these fixtures in a manner that can cut the outer jacket or damage wire insulation.
Unless individual product specifications deem otherwise:  Never connect an LED product directly to a dimmer packs, occupancy sensors, timing devices, or other related control devices.  LED fixtures must be powered directly off a switched circuit.
Unless individual product specifications deem otherwise:  Do not restrict fixture ventilation.  Allow for some volume of airspace around fixture.  Avoid covering LED fixtures with insulation, foam, or other material that will prevent convection or conduction cooling.
Unless individual product specifications deem otherwise:  Do not exceed fixtures maximum ambient temperature.
Only use fixture in its intended location.
LED products are Polarity Sensitive.  Ensure proper Polarity before installation.
Electrostatic Discharge (ESD):  ESD can damage LED fixtures.  Personal grounding equipment must be worn during all installation or servicing of the unit.
Do not touch individual electrical components as this can cause ESD, shorten lamp life, or alter performance.
Some components inside the fixture may not be serviceable.  In the unlikely event your unit may require service, stop using the unit immediately and contact an ABL representative for assistance.
Always read the fixtures complete installation instructions prior to installation for any additional fixture specific warnings.

Please see product specific installation instructions for additional warnings or any applicable FCC or other regulatory statements.

Failure to follow any of these instructions could void product warranties.
OVERVIEW

The Clarity LED is a stylish solution for overbed patient lighting. Photometric testing shows that placement above and behind the patient delivers optimal distribution of light for reading. With an optional low voltage controller, light levels can be adjusted via the nurse call system or using a separate optional pendant pillow switch.

The fixture utilizes a unique convenience switch feature (optional) which provides immediate exam lighting by simply rotating the upper lens forward. The top and bottom lights are activated automatically when the exam light (top light) is rotated forward. When the top light is moved back into place, the light automatically returns to the settings prior to examination.

UNPACKING AND INSPECTION

1. Upon receipt of Clarity LED units and prior to unpacking, inspect shipping containers for damage. Document any damage found and notify the carrier and Modular Services Company.
2. Carefully open each carton. Dispose of all excess packaging material, leaving cardboard under the unit to protect the face during installation.
3. Inspect units for defects in materials or workmanship prior to installation. It is the responsibility of the customer to report any damage or deficiencies to Modular Services Company immediately upon discovery.
4. Review final approved shop drawings and submittal booklet. The following documents will provide you with technical details specific to the installation:
   - Wiring Diagrams that are on a decal and placed on the fixture.
   - The Installation Manual for that specific fixture.

UNIT INSTALLATION

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. Do not connect to an ungrounded supply. Follow any specific instructions on product labels. Disconnect power to all circuits before wiring.

Wall Preparation and Shimming

**NOTE:** The larger slot in center of backplate is for supply wiring feed. Smaller slot near center wire feed is for low-voltage wiring when low-voltage controller option is provided.

Position the fixture’s back-plate against the wall in the mounting location over the junction box. Select at least four of the mounting holes in the back-plate to use as the fastener mounting locations. Mark the fastener locations on wall using the back-plate as a template. Check wall for straightness using the back-plate as a straightedge. Take note of any gaps between the wall and the back-plate at mounting locations (see Fig. 1). Select the suitable shims to fill in the gaps so that back-plate is not forced into a non-flat position when it is mounted to wall. Shims should fill the gap from the top to the bottom of the back-plate for maximum stability.
Backplate Mounting

1. It is the responsibility of the installing personnel to select the appropriate fasteners suitable for the wall material and construction. Screws driven into wall studs are recommended for maximum security.

2. Secure the backplate to wall with fasteners using any shims that may be required. See below for dimensional data of the back plate.

3. At least two (2) stabilizing fasteners should be located in Area "H" above the backplate hook to keep the mounting plate from pivoting forward (Fig. 2). The location of the vertical wall studs are to be determined by the installation contractor. The hole in area H must be countersunk and the fastener must be flat head. The hardware in area H must be flush to the backplate extrusion as to not interfere with the bed stop option or downward travel of the chassis into the mounting plate during installation.
4. Figure 2A shows the alignment of the wiring holes between the Clarity LED fixture and the backplate.

Hanging the Fixture

1. Align slots in back of fixture with studs in backplate.
2. Hang Clarity LED (HPW) fixture on backplate; engaging fixture hook over backplate hook.
3. If the bed power interrupt switching (“bed-stop”) option was ordered, see Figure 3 for assembly of the provided spacers over the backplate studs. If bed-stop option is not provided, omit the spacers shown in Figure 3.
4. Secure the fixture with the washers and nuts provided.
5. If bed-stop option is provided, test fixture for free vertical movement. The fixture must be free to "float" vertically for proper bed-stop operation (see Fig. 5).
ELECTRICAL CONNECTIONS

**NOTE:** Ensure that all power is disconnected at the breaker governing the circuit load. Only qualified electricians should attempt installation of this product.

1. Disconnect the power to all of the circuits before wiring the fixture.

2. For fixtures with bed-stop option, connect 12 AWG stranded leads (by others) to the building wire in the junction box, then connect them to the fixture leads inside fixture. Do not run solid wire into fixtures with the bed-stop option. The fixture must be free to "float" on mounting plate and solid wires would restrain the movement of the fixture.

3. Following the wiring diagram provided with the fixture, connect the fixture leads to the power supply leads and connect any optional switching leads using connectors (by others) suitable for the gauge and number of wires being used.

4. If a low voltage controller was ordered, refer to the wiring diagram on the controller label for the wiring options.

5. Connect the grounding wire of fixture to a proper ground.

LENS INSTALLATION

1. Orient each lens as shown in Figure 4, Position 1. There is a groove at the front of the lens which runs the length of the lens. Install the lens on the groove indicated in Figure 4, Detail views A and B.

2. Rotate the lens into position until the lens tab comes in contact with the fixture housing (Position 2).

3. Start on one end and carefully flex the lens so that the lens tab snaps into place on the housing (Position 3). Continue this procedure along the length of the lens until it is completely retained.

4. To remove the lens, pull on the curled tab until the lens is pulled away from the housing (Position 4). Start at one end and proceed along the lens.

**NOTE:** Do not use tools such as screwdrivers to pry on the lens during installation or removal. Lens breakage may occur.

Figure 4.
**BED-STOP ADJUSTMENT**

**Bed-Stop Adjustment:**

1. Remove ballast cover.

2. Loosen the two (2) Phillips screws, as shown in Figure 5, Detail A.

3. Adjust bed-stop to engage the switch when the housing is against backplate and to disengage the switch when housing is pushed up, away from backplate.

4. Tighten Phillips screws to secure this setting.

5. Test the bed-stop's function for operation as per the testing procedure below.

**Testing Functions:**

1. Test continuity from COM TERMINAL to NO TERMINAL.

2. Proper function of the fixture will have continuity with the housing against backplate, as shown in Figure 5, Detail B.

3. As the housing is moved away from the backplate, continuity should be lost.

4. Follow the bed-stop adjustment procedure below if correction is needed.
CARE AND MAINTENANCE

1. Clean with mild detergent and warm water. **Do not use lubricants or oils on the fixture.**
2. Avoid excessive moisture build-up, as it can damage mechanisms in the fixture.
3. Disinfect as required with disinfectant approved by the Environmental Protection Agency.
4. To remove difficult spots or stains, use standard household cleansers and a soft-bristled brush.
5. For parts or repairs, contact your sales representative.

WARRANTY

Modular Services Company warrants that all equipment assemblies shall be free from defects in material and workmanship for a period of 12 months from date of the owner’s acceptance to the installing contractor or the date the equipment is put into service, whichever comes first. Warranty excludes electric lamps and/or any material not furnished by Modular Services. Warranty does not cover damage due to improper installation and/or abuse.

It is the responsibility of the customer to report any noted product deficiencies to Modular Services immediately upon discovery. It is the responsibility of Modular Services to expediently resolve the discrepancy. Any modification made to the product without the written authorization from Modular Services will void this warranty.

Also, in the event product modifications or repairs are made without the written consent of Modular Services, Modular Services shall not be held liable for any cost associated with the modification or repair.

There are no warranties of fitness which extend beyond the description on the face hereof.