IMPORTANT!!!

PLEASE TAKE THE TIME TO FILL OUT THIS FORM COMPLETELY. FILE IT IN A SAFE PLACE. IN THE EVENT YOU EXPERIENCE PROBLEMS WITH OR HAVE QUESTIONS CONCERNING YOUR CONTROLLER, THE FOLLOWING INFORMATION IS NECESSARY TO OBTAIN PROPER SERVICE AND PARTS.

MODEL #     AA0-12V DC

SERIAL #

PURCHASE DATE

PURCHASED FROM
TABLE OF CONTENTS

APPENDIX

WARRANTY & RETURN POLICY

RETURN MERCHANDISE AUTHORIZATION (RMA) FORM
APPENDIX

CHASSIS LAYOUT & SCHEMATIC........................................1226-R (REV C)

LK1A0 LED LIGHTING KIT w/NO ALARM ....................... 810-01 (REV D)

LK2A0 LED LIGHTING KIT w/NO ALARM ......................... 810-02 (REV D)

WRAPLOCK FASTENING DETAIL......................................................100984
Warranty & Return Policy

TWR Lighting®, Inc. (“TWR®”) warrants its products (other than “LED Product”) against defects in design, material (excluding incandescent bulbs) and workmanship for a period ending on the earlier of two (2) years from the date of shipment or one (1) year from the date of installation.

TWR Lighting®, Inc. (“TWR®”) warrants its “LED Product” against defects in design, material and workmanship for a period of five (5) years from the date of shipment. TWR®, at its sole option, will, itself, or through others, repair, replace or refund the purchase price paid for “LED Product” that TWR® verifies as being inoperable due to original design, material, or workmanship. All warranty replacement “LED Product” is warranted only for the remainder of the original warranty of the “LED Product” replaced. Replacement “LED Product” will be equivalent in function, but not necessarily identical, to the replaced “LED Product.”

TWR Lighting®, Inc. (“TWR®”) warrants its “LED Product” against light degradation for a period of five (5) years from the date of installation. TWR®, at its sole option, will, itself, or through others, repair, replace, or refund the purchase price paid for “LED Product” that TWR® verifies as failing to meet 75% of the minimum intensity requirements as defined in the FAA Advisory Circular 150/5345-43G dated 09/26/12. All warranty replacement “LED Product” is warranted only for the remainder of the original warranty of the “LED Product” replaced. Replacement “LED Product” will be equivalent in function, but not necessarily identical, to the replaced “LED Product.”

Replacement parts (other than “LED Product”) are warranted for 90 days from the date of shipment.

Conditions not covered by this Warranty, or which might void this Warranty are as follows:

- Improper Installation or Operation
- Misuse
- Abuse
- Unauthorized or Improper Repair or Alteration
- Accident or Negligence in Use, Storage, Transportation, or Handling
- Any Acts of God or Nature
- Non-OEM Parts
  
The use of Non-OEM parts or modifications to original equipment design will void the manufacturer warranty and could invalidate the assurance of complying with FAA requirements as published in Advisory Circular 150/5345-43.
Warranty & Return Policy
(continued)

Field Service – Labor, Travel, and Tower Climb are not covered under warranty. Customer shall be obligated to pay for all incurred charges. An extensive network of certified and insured Service Representatives is available if requested.

Repair, Replacement or Product Return RMA Terms – You must first contact our Customer Service Department at 713-973-6905 to acquire a Return Merchandise Authorization (RMA) number in order to return the product(s). Please have the following information available when requesting an RMA number:

x  The contact name and phone number of the tower owner or
x  The contact name and phone number of the contractor
x  The site name and number
x  The part number(s)
x  The serial number(s) (if any)
x  A description of the problem
x  The billing information
x  The Ship To address

This RMA number must be clearly visible on the outside of the box. If the RMA number is not clearly labeled on the outside of the box, your shipment will be refused. Please ensure the material you are returning is packaged carefully. **The warranty is null and void if the product(s) are damaged in the return shipment.**

All RMAs must be received by TWR LIGHTING®, INC., 10810 W. LITTLE YORK RD., #130, HOUSTON, TX 77041-4051, within 30 days of issuance.

Upon full compliance with the Return Terms, TWR® will replace, repair and return, or credit product(s) returned by the customer. It is TWR®'s sole discretion to determine the disposition of the returned item(s).
Warranty & Return Policy
(continued)

RMA Replacements – Replacement part(s) will be shipped and billed to the customer for product(s) considered as Warranty, pending return of defective product(s). When available, a certified reconditioned part is shipped as warranty replacement with a Return Merchandise Authorization (RMA) number attached. Upon receipt of returned product(s), inspection, testing, and evaluation will be performed to determine the cause of defect. The customer is then notified of the determination of the testing.

- Product(s) that is deemed defective and/or unrepairable and covered under warranty - a credit will be issued to the customer’s account.
- Product(s) found to have no defect will be subject to a $75.00 per hour testing charge (1 hour minimum), which will be invoiced to the customer. At this time the customer may decide to have the tested part(s) returned and is responsible for the return charges.
- Product(s) under warranty, which the customer does not wish returned, the customer will be issued a credit against the replacement invoice.

RMA Repair & Return – A Return Merchandise Authorization (RMA) will be issued for all part(s) returned to TWR® for repair. Upon receipt of returned product(s), inspection, testing, and evaluation will be performed to determine the cause of defect. The customer is then notified of the determination of the testing. If the returned part(s) is deemed unrepairable, or the returned part(s) is found to have no defect, the customer will be subject to a $75.00 per hour testing charge (1 hour minimum), which will be invoiced to the customer. Should the returned parts be determined to be repairable, a written estimated cost of repair will be sent to the customer for their written approval prior to any work being performed. In order to have the tested part(s) repaired and/or returned, the customer must issue a purchase order and is responsible for the return shipping charges.

RMA Return to Stock – Any product order that is returned to TWR® for part(s) ordered incorrectly or found to be unneeded upon receipt by the customer, the customer may be required to pay a minimum 20% restocking fee. Product returned for credit must be returned within 60-days of original purchase, be in new and resalable condition, and in original packaging. Once the product is received by TWR it’s condition will be evaluated and a credit will be issued only once it is determined that the RMA Return Terms have been met.

Credits – Credits are issued once it is determined that all of the Warranty and Return Terms are met. All credits are processed on Fridays. In the event a Friday falls on a Holiday, the credit will be issued on the following Friday.
Warranty & Return Policy  
(continued)

**Freight** – All warranty replacement part(s) will be shipped via ground delivery and paid for by TWR®. Delivery other than ground is the responsibility of the customer.

REMEDIES UNDER THIS WARRANTY ARE LIMITED TO PROVISIONS OF REPLACEMENT PARTS AND REPAIRS AS SPECIFICALLY PROVIDED. IN NO EVENT SHALL TWR® BE LIABLE FOR ANY OTHER LOSSES, DAMAGES, COSTS, OR EXPENSES INCURRED BY THE CUSTOMER, INCLUDING, BUT NOT LIMITED TO, LOSS FROM FAILURE OF THE PRODUCT(S) TO OPERATE FOR ANY TIME, AND ALL OTHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING ALL PERSONAL INJURY OR PROPERTY DAMAGE DUE TO ALLEGED NEGLIGENCE, OR ANY OTHER LEGAL THEORY WHATSOEVER. THIS WARRANTY IS MADE BY TWR® EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, TWR® MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCT(S) FOR ANY PARTICULAR PURPOSE. TWR® EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES.
RETURN MERCHANDISE AUTHORIZATION (RMA) Form

RMA#: ________________________ DATE: ________________________

CUSTOMER: ____________________________

____________________________________

CONTACT: ______________________ PHONE NO.: ______________________

ITEM DESCRIPTION (PART NO.): ______________________

____________________________________

MODEL NO.: ______________ SERIAL NO.: ______________________

ORIGINAL TWR INVOICE NO.: __________ DATED: ______________________

DESCRIPTION OF PROBLEM: ______________________

____________________________________

____________________________________

____________________________________

SIGNED: ______________________ DATE NEEDED: ______________________

RETURN ADDRESS: ____________________________

PLEASE RETURN PRODUCT TO: 10810 W. LITTLE YORK RD. #130 HOUSTON, TX 77041-4051
RETURN MERCHANDISE AUTHORIZATION (RMA) FORM

RMA#: ___________________________ DATE: ___________________________

CUSTOMER: ______________________________________________________

____________________________________________________________________

CONTACT: ______________________ PHONE NO.: ______________________

ITEM DESCRIPTION (PART NO.): ______________________________________

____________________________________________________________________

MODEL NO.: _______________ SERIAL NO.: __________________________

ORIGINAL TWR INVOICE NO.: ___________ DATED: _________________

DESCRIPTION OF PROBLEM: _________________________________________

____________________________________________________________________

SIGNED: ______________________ DATE NEEDED: ___________________

RETURN ADDRESS: _________________________________________________

____________________________________________________________________

PLEASE RETURN PRODUCT TO: 10810 W. LITTLE YORK RD. #130 HOUSTON, TX 77041-4051
!!WARNING!!
VERIFY POLARITY CONNECTIONS ON
THE INPUT AND OUTPUT.
NEGLIGENCE WILL RESULT IN
FAILURE OF THE PHOTOCELL
AND/OR LED SIDELIGHT. THIS WILL
VOID YOUR WARRANTY.
BILL OF MATERIALS

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>QTY.</th>
<th>TWR PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>OL2-LED</td>
<td>DOUBLE OBSTRUCTION LIGHT LED</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>UNY205</td>
<td>3/4&quot; UNION</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>5012902</td>
<td>BREATHER</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>SS10012</td>
<td>WRAPLOCK</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>JB5</td>
<td>3/4&quot; JUNCTION BOX</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>PIPDOP</td>
<td>4 oz. PIPE DOPE</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>A314</td>
<td>3/4&quot; CONDUIT LOCKNUTS</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>EL3490</td>
<td>3/4&quot; 90° SHORT ELBOW</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>N3414</td>
<td>3/4&quot; X 4&quot; CONDUIT NIPPLE</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>OL2PIGTAILG</td>
<td>18&quot; OL2 PIGTAIL WITH GROUND</td>
</tr>
<tr>
<td>*</td>
<td>11</td>
<td>AAO</td>
<td>CONTROLLER</td>
</tr>
</tbody>
</table>

ITEM NUMBERS #12-#14 ARE NOT INCLUDED IN THE KIT BUT ARE REQUIRED FOR INSTALLATION.

12 – CONDUIT34  3/4" CONDUIT (TWR HT. + 30'/9M)
13 – 14THHNWHT  #14 THHN WHT, WIRE (TWR HT.+40'/12M)
14 – 14THHNBLK  #14 THHN BLK, WIRE (TWR HT.+40'/12M)

* = ITEMS NOT SHOWN
~ = ITEMS QUANTITY CALCULATED ACCORDING TO STRUCTURE HEIGHT.

NOTES:
1) CONDUIT SIZE BASED ON USING TYPE THHN WIRE.
2) USE RIGID GALVANIZED STEEL CONDUIT.
3) BREATHERS ALLOW FOR CIRCULATION OF AIR TO PREVENT CONDENSATION.
BILL OF MATERIALS

<table>
<thead>
<tr>
<th>ITEM NO.</th>
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<th>TWR PART NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>OL2</td>
<td>DOUBLE OBSTRUCTION LIGHT LED</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>UNY205</td>
<td>3/4&quot; UNION</td>
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<tr>
<td>3</td>
<td>2</td>
<td>5012902</td>
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<td>4</td>
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<td>SS10012</td>
<td>WRAPLOCK</td>
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<tr>
<td>5</td>
<td>2</td>
<td>JB5</td>
<td>3/4&quot; JUNCTION BOX</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>JB0</td>
<td>3/4&quot; STRAIN RELIEF BOX</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>PIPDOP</td>
<td>4 oz. PIPE DOPE</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>A314</td>
<td>3/4&quot; CONDUIT LOCKNUTS</td>
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</tr>
<tr>
<td>10</td>
<td>1</td>
<td>N3474</td>
<td>3/4&quot; x 4&quot; CONDUIT NIPPLE</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>OL2PIGTA1G</td>
<td>18&quot; OL2 PILOT WITH GROUND</td>
</tr>
<tr>
<td>*</td>
<td>1</td>
<td>AAG______</td>
<td>CONTROLLER</td>
</tr>
</tbody>
</table>

ITEM NUMBERS #13-#15 ARE NOT INCLUDED IN THE KIT BUT ARE REQUIRED FOR INSTALLATION.

~ 13  =  CONDUIT34  3/4" CONDUIT (TWR H.T. + 30'/9M)
~ 14  =  14THINWHT  #14 THIN WH. WIRE (TWR H.T.+40'/12M)
~ 15  =  14THINBLK  #14 THIN BLK. WIRE (TWR H.T.+40'/12M)

* = ITEMS NOT SHOWN
~ = ITEMS QUANTITY CALCULATED ACCORDING TO STRUCTURE HEIGHT.

NOTES:
1) CONDUIT SIZE BASED ON USING TYPE THIN WIRE.
2) USE RIGID GALVANIZED STEEL CONDUIT.
3) BREATHERS ALLOW FOR CIRCULATION OF AIR TO PREVENT CONDENSATION.

TOWER WIRING AND ASSEMBLY

TYPICAL SPACING EVERY 7'-6"/2M (MAX.)

TO CONTROLLER
**WrapLock**

**CUT OFF BAND TO PROPER LENGTH.**
*(SEE TABLE ON COVER OF BOX)*

1. --- PASS ONE END THROUGH YOKE AND BEND BACK ABOUT 1 1/2" AND FLATTEN DOWN.
2. --- PASS BAND AROUND WORK AND THROUGH YOKE.
3. --- REPEAT AND PASS END THROUGH A SECOND TIME, DRAW UP FREE END SNUGLY WITH PLIERS.
4. --- INSERT FREE END IN SLOT OF RATCHET.
5. --- TURN DOWN UNTIL CLAMP IS TIGHT.
6. --- BACK OFF SLIGHTLY TO REMOVE RATCHET, CLAMP IS NOW SECURELY LOCKED.

**TO REMOVE WrapLock**

UNCOIL END WITH RATCHET, PRESS DOWN AT POINT WHERE BAND METAL HAS BEEN FORCED THROUGH CURVED PART OF YOKE.

**TOWER ANGLE BRACE**

**TYPICAL TECHNIQUE FOR APPLICATION OF WRAPLOCK**

**ELECTRICAL CONDUIT**

**FRONT SIDE VIEW**

**BACK SIDE VIEW**

**WRAPLOCK FASTENING DETAIL**