

# LP Archery Products

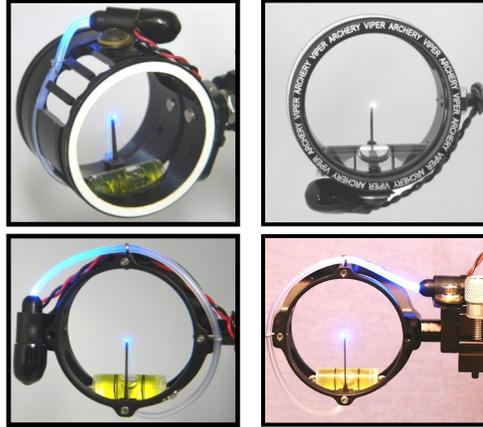
## PRO-LIGHT DX2

### Digital Light Kit for Competition Scopes



### Ultimate Sight Pin Illuminator

**PLDX2 Multi-Pin Sight Kits & All PLK Accessories Also Available**  
 Contact LPA or your local Dealer



**Due to universal design, some technical ability is required for proper installation.**  
**NO Kit/Install Instructions for Sure-LOC S2 Scope.**

### Package Contents

Digital Power Pack w/ (2) 2032 Batteries  
 Velcro or Velcro/Hardware Mounting Kit  
 Tubing Adaptor, .094 Tube to 8-32 Hole  
 Operating and Mounting Instructions

- Sight-Pin Light - Blue, (Threaded)
  - 8-32     \_\_\_\_\_
- Tubing, 2 x 8" - .086 OD & .094 OD
- 24" Fiber (Dia. & Color Checked Below)
  - .010     .015     .019     .029
  - Blue     Clear     Yellow
  - Green     Red     Hunter Orange
- Additional Set of (2) 2032 Batteries

(This Kit not designed for use w/ Axcel Scopes)  
 For Axcel Scopes w/ Axcel Sight use: PLK-AXL-1019B

**LIMITED 1 YEAR WARRANTY**  
**WITH VALID PROOF OF PURCHASE**

## INSTALLATION INSTRUCTIONS

**Not Following Instructions May Cause Product Failure &/or Void Warranty**

### Sight Pin Light (LED Assy.) & Power/Control Pack Installation:

**Pwr/Cntrl Pack is NOT 100% Water Proof. Cover Pack w/ EXWC in Extremely Heavy Rain.**  
**EXWC=Extreme Weather Cover (Included w/ Kits or available thru LP Archery)**

1. Screw SPL Brass into tapped hole and tighten firmly with fingers. For install into a competition scope and/or adding a tapped hole into a scope or sight, see Comp. Scope Installation.
2. **Bend wires to one side of SPL Brass and press on black rubber cap for maximum protection or secure with Zip tie around SPL. See pictures below.** Allow wires to hang.
3. Determine location for Power/Control Pack (see pictures below or pg. 4).
4. Alcohol wipe an area a Velcro pad may be placed on bow or sight. Wipe dry with paper towel or allow to air dry.
5. Remove hard Velcro pad from soft Velcro pad on back of P/C pack. Peel backing off hard Velcro pad & adhere to pre-determined alcohol wiped location. Press firmly for 20 seconds. Trim pad to fit if needed.
6. Remove screw from top side of P/C Pack & separate halves. Insert a battery into each battery holder with positive side facing upward. Replace cover and Phillips screw onto base.
7. Align soft Velcro Pad on P/C Pack with hard Velcro pad & press firmly.
8. Adhere a **second** hard Velcro pad (trim to fit) to opposite side of sight bar or bow riser. Velcro straps should wrap over second hard Velcro pad and Power Control Pack to ensure maximum P/C Pack stability.
9. Plug SPL wire into P/C Pack. For competition setups use top port; for hunting sights use bottom port.
10. Run SPL wire along sight/scope housing and secure with Zip ties or extra Velcro strapping. Allow necessary slack in SPL wire for yardage adjusting. See pictures opposite page.

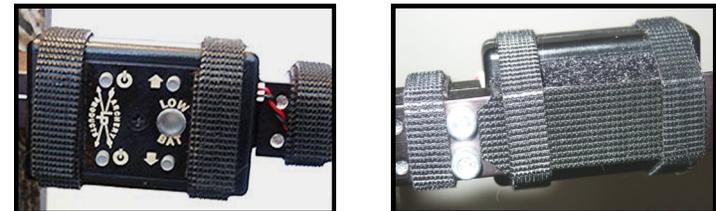
### Sight Pin Light (SPL/LED Assy) Mounting Pictures

**EXTREMELY IMPORTANT: SEE PICS BELOW & STEP 2 ABOVE**

**\*\*NOT DOING STEP 2 WILL CAUSE LED FAILURE\*\***

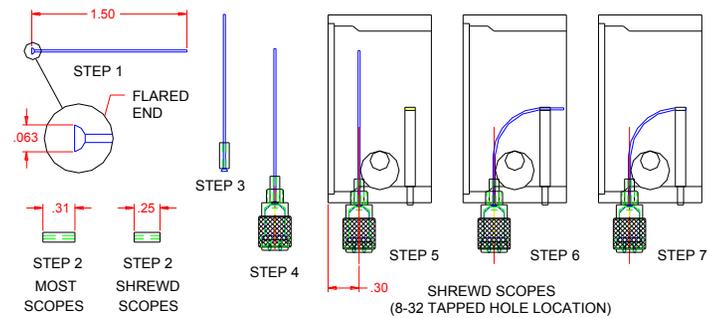


### Power/Control Pack Mounting Pictures: Competition Sight



Alcohol wipe both sides of sight bar, and apply Velcro pads to BOTH sides. Trim as needed.

## Shrewd, CR, CBE or Extreme Scopes (non-wrap): Sight Pin Light (SPL) Assy. Installation Instructions



1. Cut 1.5" - 2" long piece of fiber from the 24" piece supplied, depending on scope diameter. Flare one end of fiber by heating the short end of an Allen wrench and gradually bringing it close to the fiber, without touching if possible. Repeat until the flared end of fiber is at least 1/16" or larger (.063"-.080") in dia.
2. Cut a 5/16" (.31) or 1/4" (.25) for Shrewd Scope, piece of sheathing from 8" piece supplied.
3. Slip pre-cut piece of sheathing over 1.5" piece of flared fiber optic strand.
4. Carefully press sheathing and fiber with flared end into brass LED housing. If sheathing w/fiber does not seem tight inside brass housing, remove sheathing and fiber from housing. Pull sheathing off fiber and slightly mash down the end going into LED brass housing. Re-insert with fiber into brass housing. Sheathing will fit tight but still be removable if necessary.
5. Screw LED assembly with fiber into scope housing. Fiber length may need to be trimmed before actually feeding it into up or down pin or lens hole. Check by laying fiber near pin first, if it sticks out too far past pin, trim accordingly.
6. Once length is correct, feed fiber through pin.
7. Flare this end to your preference using the heated end of an Allen wrench as recommended, w/o touching fiber (i.e. radiated heat).
8. Proceed to GEN. INSTALLATION INSTRUCTIONS, PL DX LED... Installation, Step 2.

### ADAPTOR, BRASS, 8-32 Hole to .094 SPL Tubing (In Hardware Kit) (Use w/ Razor Fire or Equiv. Pins; NOT-Tube Pins)

Mount 8-32 SPL w/ Nylon tip using cable clamp to desired location on scope. See CBE Install Pic. Below for example. Install Adaptor using (1) 8-32 washer at desired location. Push (twisting) .094 tubing up through opening of adaptor so ~1/16" is exposed. Run tube into 8-32 SPL allowing just enough slack in tube to secure to side of scope w/ zip tie, cotter pin or 8-32 BHCS & washer. Cut tube as needed.

### CBE Scope: Sight Pin Light (SPL Assy) Installation Instructions

(For Short Fiber and/or Down-Pin set-up; See Installation Instructions Above)

1. Install SPL on scope top w/ cable clamp, 8-32 button head screw & brass washer- not shown.
2. Install tubing into scope bottom hole, if tubing fits loose, pinch slightly w/ needle nose pliers. Wrap tubing around scope side & into LED; remove tubing from LED & cut to length, as shown. Tubing should go into SPL ~5/32" or to about middle of plastic clamp. (see photo at right)
3. Install fiber into tubing & up into scope. Carefully arc fiber into pin, as shown.
4. Flare fiber at pin end. Carefully pull flared end of fiber flush against scope pin.
5. Cut fiber at SPL end ~3/16" longer than tubing. Flare fiber at SPL end to .060"-.080" diameter. Fiber needs to be flush with tubing at SPL end.
6. Install tubing with flared end of fiber into SPL. (see photo at right)
7. Using wire from a twist-tie (remove plastic covering), or small zip-tie. Secure tubing to edge of scope. Trim zip-tie or trim twisted wire and push down along tubing as shown.
8. Cut ~1/8" off of open end of the Soft Rubber Cap.
9. Secure wires along side of scope housing at windage rod with a zip tie. Secure wires were ever convenient, allowing slack for windage & elevation adjustment.
10. Continue to Step 3 of GEN. INSTALL. INSTRUCTIONS, PL DX SPL & Power/Control Pack Installation.



### Adding an 8-32 or 10-32 tapped hole: to scope housing, fiber guard or pin sight:

1. Determine the best location for the SPL Brass. See drawing on other side of this sheet for Shrewd Scopes.
2. For aluminum scopes, pre-drill an .062 diameter starter hole.
3. Drill out the starter hole with a #29 bit for an 8-32 hole or #21 bit for a 10-32 hole.
4. Carefully tap hole to required tap size. NOTE: Many tool or hardware stores supply the #29 or #21 bit with the tap as a set.

**LP Archery Products, LLC nor Pro-LIGHT DX Warranty covers a scope or sight that has been damaged by adding a tapped hole incorrectly. Be sure that whomever adds tapped hole to scope or sight is qualified to do so correctly.**

### Classic Scope w/ large groove Fiber Guard Sight Pin Light (SPL) Assy. Fiber Installation:

(Large groove fiber guard is latest model with an ~.090" wide groove)



### PLEASE READ ALL STEPS BEFORE BEGINNING (Especially for Blue Fiber)

1. If current Stainless Steel pin is being used, remove old fiber for best results. If fiber breaks off or is very difficult to remove, install a new stainless steel pin centered in scope, before proceeding to Step 2.
2. Place SPL with cable clamp at 1 o'clock position (see pics) & mark hole center.
3. Drill hole thru fiber guard with #29 bit, then tap for 8-32 screw as shown. Mount cable clamp with SPL Assy to fiber guard using 8-32 button head screw.
4. For best results use latest (clearer) sheathing from Classic Archery Products.
5. Push sheathing into base of scope about 1/4"-3/8" and over Stainless Steel pin. Sheathing should bottom out, (avoid moving SS Pin position).
6. Wrap sheathing around fiber guard in grooves and next to black cap/cable clamp of SPL Assembly. Cut sheathing off 7/16"-1/2" from tip of black cap toward SPL Assembly wires.
7. Install sheathing into SPL Assembly. Cut sheathing length until it fits snugly into grooves of fiber guard and fits into SPL Assembly about 7/16". Sheathing should not quite bottom out. Remove sheathing from scope and set aside.
8. Remove SS Pin from scope & fiber from Teflon sheathing unless using other fiber. Insert fiber into SS Pin from BOTTOM of Pin. **DO NOT** insert fiber from viewing end of SS Pin - doing so will reduce brightness. Continue feeding fiber through Stainless Steel Pin until it sticks out of viewing end of SS Pin about 1/32". **Allow fiber to hang, but be careful not to kink it.**
9. Flare viewing end of fiber to desired size - see Step 1 of Competition Scope Installation on other side of this sheet. **Do not over flare fiber. If you do, pull fiber out, trim it and re-flare.** Gently pull hanging fiber so viewing end is almost flush with Stainless Steel Pin. Feed fiber with SS Pin thru inside hole of scope until brass sleeve of SS Pin bottoms out, align SS Pin and tighten screw.
10. Carefully slip sheathing over hanging fiber. Re-install sheathing into base of fiber guard & over SS Pin as in Step 5. Loosen SS Pin screw if needed to get sheathing to install, then re-align & tighten holding screw. **Do not kink fiber. If blue fiber is used and kinked at all, it must be replaced.**
11. Cut fiber 3/16" longer than sheathing, and flair it according to Step 1 of Competition Scope Installation (see opposite side of sheet). This end should be flared very large. Press sheathing into groove half way to first cotter pin location.
12. Cut longer halves of 2 brass cotter pins to match shorter halves. Slip 1 brass cotter pin over sheathing, align with first hole. Finish pressing sheathing into groove and slip cotter pin into hole. Tighten down cotter pin holding screw.
13. Slip 2nd cotter pin over sheathing and begin pressing sheathing into groove. Align cotter pin with hole and simultaneously insert flared fiber end into LED Assembly. Tighten down cotter pin screw.
14. Hold SPL and cable clamp while tightening down its button head screw.
15. Use Zip tie (see pics) to secure wires at brass. Or for best protection, cut off ~1/16" of open end of black rubber cap and press over wires and knurled end of SPL Brass (rubber cap is too long if not cut). Proceed to Pro-Light DX SPL & Power/Control Pack installation, Step 3.

# Sight Pin Light (SPL) Installation Instructions: Competition Scopes

## Sure-LOC Black Eagle Scope



### Recommended Installation Method When used with Sure-Loc Sight

### Optional Installation Method

For both installations above, use smaller (.086" OD) tubing included in PLDX kit.

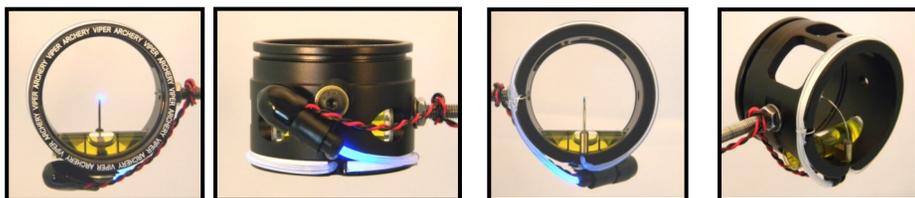
#### For Installs with Sure-LOC Black Eagle Scope & Sure-LOC Sight:

Remove SS 6-32 SHCS in windage block, closest to scope housing. Reinstall 6-32 screw with small brass washer, cable clamp and SPL as shown, do not tighten screw completely. Cut off at ~45 degrees a small amount off of one end of tubing, then carefully push tapered end thru pre-drilled hole in bottom of scope until close to height of level vial, (if necessary, remove vial, install tube, then reinstall level vial). Run tube around scope as shown and along side of SPL/cable clamp, and cut tube at middle of cable clamp. Check length of tube by inserting thru cotter pins and into SPL, trim if needed. After tubing is cut to correct length, refer to steps 3, 4 & 5 of CBE Installation Instructions P-2, for inserting and flaring fiber ends instructions. Finish by following steps 2-10 of General Installation Instructions P-1.

#### For Installs with Sure-LOC Black Eagle Scope & Non Sure-LOC Sight:

Mount SPL to side of Sure-Loc Scope using cable clamp and 10-32 button head screw, see picture above right. Mount SPL pointing up and slightly towards lens. Follow above tubing and fiber installation instructions, except route tube going down into SPL. After tubing is cut to correct length, refer to steps 3, 4 & 5 of CBE Installation Instructions P-2, for inserting and flaring fiber ends instructions. Finish by following steps 2-10 of General Installation Instructions P-1.

## Viper Scope



Above configuration is an awesome setup.

**"BUT"** requires modifications not easily done by most customers or shops.

Remove current fiber and Pin. Drill an .094" dia. hole thru bottom of housing where fiber goes thru scope housing. Be careful new .094" dia. hole is centered with pre-drilled hole in scope, drill bit will want to move Off-Center. With Viper-Pin secured upside down in a vise/end mill; drill an .090"-.091" (2.3mm) hole ~.150"-.170" max deep into hole for fiber (in-line w/SS tube). Press .094" tubing into .091" hole, it will be tight, but it needs to be. Reinstall Viper Pin, feeding tubing thru new .094" drilled hole in scope, reinstall SS SHCS to hold pin in place, allow tubing to hang loose. Secure SPL with cable clamp, 8-32 button head screw & brass washer, as shown in above 2nd picture. Wrap tubing around scope in fiber channel, laying along side of SPL cable clamp. Cut tubing at middle of cable clamp. Insert tubing into SPL, it should insert into SPL about 5/16" and not be loose in fiber channel, cut if too long, see above 3rd picture. Remove tubing from SPL, insert fiber from Pin end thru tubing and leave ~1/8" long at Pin end and 1/4" long at Tubing end. Flare Pin end at least a little (or to preferred size) to smooth out surface. Pull fiber from other end so fiber is flush at Pin end. Flare fiber at SPL end at least to .060 & up to dia. of tubing (~.090). Secure tubing on side of Viper Scope housing with a short piece of small dia. wire (twist-tie w/plastic coating removed works well). Insert small (twist-tie) wire thru small hole original fiber was initially secured at, see above pics 3 and 4. Twist wire around tubing, trim and press out of way. Finish by following steps 2-10 of General Installation Instructions P-1.

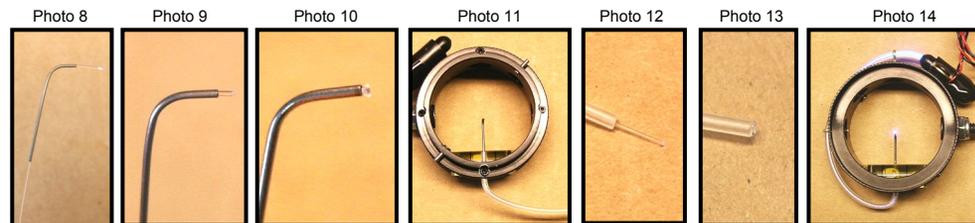
## HTM Scope: (or scopes w/o razor fire pin option)

Late 2006 model HTM scopes have an 8-32 tapped hole thru the scope housing at 1 or 11 o'clock (RH/LH). If your HTM scope does not have the 8-32 tapped hole in it already, it will need to be added. (see photo 1)

Using #44 drill bit (.089" dia), drill out small BOTTOM hole of scope, do not drill into level vial. Secure Sight Pin Light (SPL) onto Scope using Cable Clamp, small brass washer and 8-32 Button Head Screw, as shown, (Photo 1). Cut off 1/16" of Rubber Cap, keep closed end piece and discard open piece, (Photo 2). Bend wires coming out of SPL along side of knurling (do not bend wires back & forth). Press Rubber Cap over wires and knurling until Rubber Cap is flush with Cable Clamp, (Photo 3). Insert .086 tubing (W/O FIBER) through drilled out hole & almost to top of level vial. Insert Stainless Steel Pin into tubing and 3/32" out of Scope. Carefully secure tube/SS Pin with set screw, (Photos 4 & 5). Wrap tube around scope and along OUTSIDE of Cable Clamp holding SPL. Using X-ACTO Knife or equivalent, CAREFULLY cut off end of tube at about mid point of Cable Clamp, (Photo 6). Slip one Cotter Pin over FP Tube & insert into side hole of scope. Insert 2nd Cotter Pin over tube & insert Cotter Pin into top hole of scope simultaneously inserting tube into SPL. The tube should go into SPL about 3/8". Cut length of tube if necessary. Cut Cotter Pins to fit, (Photo 7).



Loosen set screw and remove SS Pin from tube in scope. Cut off one end of Fiber at a SHARP ANGLE and feed through SS Pin from long end toward curved end of SS Pin, (Photo 8). Cut fiber end square to SS PIN end. Flare viewing end of fiber to desired size. Heated short end of 1/32" Allen wrench works well. Pull Fiber flush to SS Pin. Set aside SS Pin with fiber, (Photos 9 & 10). Remove tube from SPL and two Cotter Pins from top and side of scope. Keep tube in bottom hole of scope and CAREFULLY feed end of fiber (w/o SS Pin) into tube from inside the scope. Be extra careful to AVOID kinking fiber as you insert SS Pin into FP Tube near the Level Vial, (Photo 11). Align SS Pin left & right with Scope center and tighten down Set Screw. If necessary, carefully bend SS Pin toward/away from Level Vial in order to center SS Pin vertically, (Photos 11 & 13). Cut Fiber ~3/16" past end of tube. Flare fiber until flush with tube using heated short end of 1/8" Allen wrench, (Photo 12 & 13). Re-insert Cotter Pin with tube into side hole and secure with Set Screw. Insert Cotter Pin with tube into top hole and simultaneously into SPL, and secure with Set Screw, (see photo 14). Continue to STEP 3 of GENERAL INSTALL. INSTRUCTIONS, Pro-Light DX & Power Pack Installation.



## Sword Scope



Remove original fiber and tubing, cut tubing at windage rod anchor points. Remove sight pin from scope housing. Drill and tap an 8-32 tapped hole in center of top rib, see page 2 for adding 8-32 tapped hole. Refer to steps 1-10 of CBE Installation Instructions page 2. Finish by following steps 2-10 of General Installation Instructions P-1.

## **Pro-LIGHT DX2—Features/Operating Instructions—PLEASE READ CAREFULLY**

***Power/Control Pack is Very Weather Proof. But, IS NOT 100% Water Proof.  
Cover P/C Pack in Heavy Rain w/ included Extreme Weather Cover. Remove EWC out of rain.  
If P/C Pack get's wet; ASAP remove both batteries from P/C Pack and allow it  
to air dry. Blowing air under battery holders is additionally beneficial.***

### **Battery Life, Installation and Removal: (USE ONLY 2032 3V LITHIUM BATTERIES)**

Batteries will last ~10 hours using quality 2032 batteries & one Sight Pin Light (SPL) at MAX Brightness. If 2 SPL's are used & On, or one SPL is On at a low brightness setting, battery life will vary from far-less than 10 hours to more than 20 hours. To install batteries, un-screw Black Thumb Screw in middle of case ONLY part way, until it releases case top from case bottom. Slide a 2032 battery under each battery holder, positive side up & centered on Gold Circles. To remove battery, push battery outward with thumb nail (or small Allen wrench) until the battery pops over case edge & can be pulled out using fingers. Always replace both batteries at same time. When batteries are installed for first time or replaced, each SPL output will be at Level (6) brightness when it is first turned on or back on.

### **Turning Pro-LIGHT DX2 On or Off and Adjusting Brightness:**

There are Two On/Off buttons (represented by a circle with a line through it), two outputs, each in line with and corresponding to an On/Off button. Top & Bottom Outputs are to right side of unit when LOW BAT text is readable. Plug an SPL into the Top or Bottom output and press corresponding On/Off button. To shut SPL output off, hold down the corresponding outputs' On/Off button for two seconds. Brightness adjustments will affect the last On/Off button (in-line output) pressed. To adjust SPL brightness when ON press and release the UP arrow to increase or DOWN arrow to decrease brightness. Holding down the UP or DOWN arrow button will scroll through brightness levels.

### **Pre-SET & Auto-Off Settings:**

Top SPL output is pre-set to a 2-minute Auto-Off setting. The Bottom SPL output is pre-set to a 40-minute Auto-Off setting. The pre-set or programmed Second or Minute Auto-Off time will reset if the On/Off button or an Up/Down button is pressed and released any time while the SPL is still On. For example, if the top output Auto-Off is at the pre-set 2 minutes, and after 1 minute the top On/Off button is pressed and released (not held down), the top output will reset for another 2 minutes. Or if the top output is programmed for 4 minutes, and at 2 minutes the top On/Off button or either Up/Down Arrow is pressed and released, the top output will reset for another 4 minutes.

### **LOW BAT (Low Battery) LED Warnings:**

The LOW BAT LED on the Power Pack will give three distinct warnings before losing power. Warning times apply when one SPL is at MAX Brightness. The first warning is 3 Quick Blinks repeated 3 times and indicates ~1.5 hours before unit will shut off. The second warning is 2 Quick Blinks repeated 3 times and indicates ~1 hour before unit will shut off. The third and final warning is 1 Blink repeated 3 times and indicates ~20 minutes until unit will shut off. At any time during a warning cycle one of the four buttons is pushed, the LOW BAT LED will repeat its current warning. The LOW BAT warning cycle also repeats approximately every 10 minutes.

### **Top & Bottom Output Features & Programming:**

***BEFORE ANY UNIT PROGRAMING - BOTH OUTPUTS MUST BE OFF.  
Even if one output isn't being used, both outputs must be off to program either output.***

### **Stored Programmed Settings:**

The PLDX2 stores last programming changes indefinitely, even when both batteries are replaced or removed. To return to pre-set/default Auto-Off times (2 mins Top; 40 mins Bottom Outputs) a Hard Reset must be performed.

***Hard Reset:*** Erases user programming, & resets P/C Pack to defaults.

HOLD DOWN BOTH ARROW BUTTONS (~5 seconds), wait until the LOW BAT Light Blinks (4) Times Quickly. The Power/Control pack is now back to 2 mins Auto-Off for Top Output and 40 mins Auto-Off for Bottom Output.

### **Programmable Features:**

Top Output has programmable Second &/or Minute Modes. Bottom Output only has programmable Minute Mode. Second Mode is programmable for 10, 12, 14, 16, 18, 20, 30, 40, 50 or 60 seconds. To program Top Output for seconds, hold down Bottom Arrow button, then press and release Top On/Off button. The LOW BAT light will blink - one blink equals 10 seconds, two blinks equals 12 seconds, etc., as noted. Release Bottom Arrow button when desired seconds time setting is reached.

Minute Mode is programmable for 2, 4, 6, 8, 10, 20, 30, 40, 50 & 60 minutes. To program Top or Bottom Output for minutes, depress Top Arrow button, then press and release Top On/Off button to program Top Output or Bottom On/Off button to program Bottom Output. The LOW BAT light will blink - one blink equals two minutes, two blinks equals 4 minutes, etc., as noted. Release Top Arrow button when desired minutes time setting is reached.

### **Low-Voltage Mode (LVM): FOR Top & Bottom Outputs:**

Low-Voltage Mode drops voltage to Both outputs, lowering all 10 brightness settings. Adding ~6 dimmer settings than in Normal-Voltage Mode. LVM can be used when lowest brightness setting in Normal-Voltage Mode is too bright for conditions. To set Both Outputs to LVM, hold down the Bottom Arrow button and press and release Bottom On/Off button. The LOW BAT light will blink quickly twice, signifying change to LVM for Both Outputs. To return to Normal-Voltage Mode, repeat this sequence. Returning to Normal-Voltage Mode is signified by three quick blinks. Both outputs will be OFF & retain the last programmed Auto-Off setting for each.

## **\*\*WARRANTY WARNING\*\***

**READ & FOLLOW ALL INSTALLATION  
WARNINGS & INSTRUCTIONS!**

**FAILURE TO FOLLOW INSTRUCTIONS  
CAN CAUSE UN-WARRANTED  
PRODUCT FAILURE.**

## **\*\*\*EYE DANGER\*\*\***

**DO NOT LOOK DIRECTLY  
INTO LIGHT BEAM,  
DOING SO MAY DAMAGE  
YOUR EYESIGHT.**

## **\*\*HAZARD WARNING\*\***

**Do not disassemble, recharge or expose  
batteries to fire or high temperature.  
Keep in original package until ready to use  
and dispose of used batteries promptly.  
Keep away from small children.  
If swallowed, promptly see doctor and  
have doctor call (202) 625-3333 collect.**

## **\*\*BATTERY WARNING\*\***

**USE ONLY 2032 3 VOLT  
LITHIUM BATTERIES  
DO NOT USE  
RECHARGEABLE  
BATTERIES**

**IN GOD WE TRUST IN  
CHRIST WE CAN HAVE  
ETERNAL LIFE  
John 3:16**

**LP Archery Products  
Are Proudly Made  
In The USA**

**FOR ASSISTANCE:  
Call Office: 866.586.7305 (or)  
Email: [larry@lparcheryproducts.com](mailto:larry@lparcheryproducts.com)**