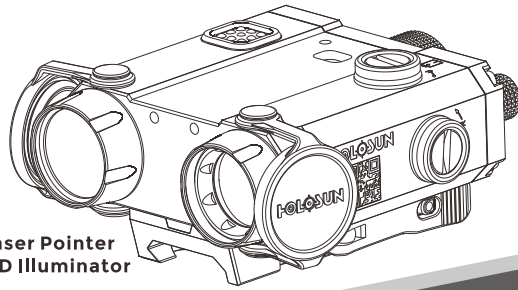


LS420

Multi-Laser Devices

User's Manual



LS420G:
Green/IR Laser Pointer
IR Laser/LED Illuminator
LS420R:
Red/IR Laser Pointer
IR Laser/LED Illuminator



**LASER RADIATION
DO NOT STARE INTO BEAM**

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1. GENERAL INFORMATION

1.1 SYSTEM DESCRIPTION

The LS420 is a Class IIIa laser device that features a Visible Laser Pointer for daylight or low light operations, an IR Laser Pointer for NVD, an IR Illuminator and a white LED Illuminator. The LS420 emits the highly collimated Visible Pointer, IR Pointer for precise aiming. The Visible Pointer, IR Pointer and IR Illuminator are concentric.

1.2 COMPONENT DESCRIPTION

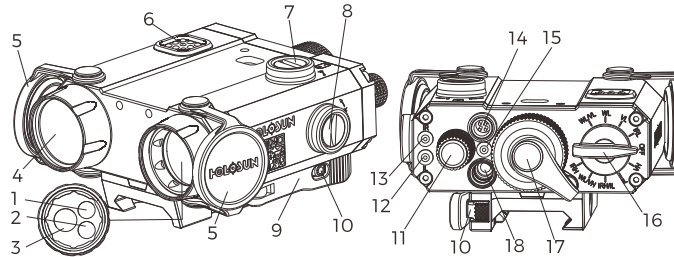


Fig 1

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1	Green Laser	7	Elevation Adjuster	13	IR Pointer Indicator
2	IR Pointer	8	Windage Adjuster	14	Recharger Port
3	IR Illuminator	9	Handle	15	Recharging Indicator
4	White LED	10	Locker	16	Mode Selector
5	Protective Cover	11	Focusing Knob	17	Battery Compartment
6	Fire Switch	12	IR IL Indicator	18	Remote Cable Switch

1.3 PACKING

The package should contain the following items:

- LS420 Lasers Sight
- User manual
- Trox Tool
- lens cloth
- 2*CR123A Battery

2. FEATURES

- The Visible Pointer, IR Pointer and IR Illuminator are concentric so that the user could adjust three beams simultaneously via same adjuster.
- The green laser is direct green laser that is more energy-saving, brighter, more stable than DPSS laser.
- The LS420 features the low-battery indicator, and IR Pointer and IR Illuminator indicators, and recharging indicator.
- Quick Release Mount.
- Waterproof and Waterproofed Remote cable switch.
- Aluminum housing with Micro arc oxidation finish.
- The focus ranges from 95 to 210mrad and the knob locates at ocular side.

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3. SPECIFICATIONS

Parameter		LS420G				LS420R			
Laser Sight	Wavelength(nm)	520		830		635		830	
	Output Power (mW)	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi
		<1	<5	0.3	<0.7	<1	<5	0.3	<0.7
	FDA Class	II		IIIa		II		IIIa	
Divergence(mrad)	0.6		0.5		0.6		0.5		
Laser Illuminator	Wavelength(nm)	830							
	Output Power(mW)	<4							
	Divergence(mrad)	Adjustable:95 - 210							
White LED Illuminator	FDA Class	IIIa							
	Color Temp	6000K							
Output Power(Lum)	<800								
Adjustment range	±60MOA								
Battery	CR123A×2/18650×1								
Operating Temperature	-40℃-51℃								
Storage Temperature	-40℃-65℃								
Water Proof	Ip67								
Color housing	Desert Sand/ Matte Black								
Length:mm	95								
Width × height:mm	75×43								
Weight: (g)	300								

4. OPERATING INSTRUCTIONS

4.1 SAFETY SUMMARY

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WARNING - LASER RADIATION

- DO NOT stare into the laser beams.
 - DO NOT look into the laser beam through binoculars or telescopes.
 - DO NOT point the laser beam at mirror-like surfaces.
 - DO NOT shine the laser beam into other body's eyes.
- SAFETY ALERTS**
- WARNING**
- DO NOT store LS420 with battery installed.
 - Ensure the Mode Selector is OFF before checking the Lens of LS420.
 - Do not recharge the non-chargeable CR123A battery.
- CAUTION**
- Identifies risk of damage to the equipment.
 - All the directions are given from the shooter's viewpoint.
 - DO NOT over-adjust the W&E adjuster by forcing them beyond their end of travel.



4.2 BATTERY INSTRUCTIONS

4.2.1 BATTERY INSTALLATION

1. Unscrew the battery cap in a CCW direction. Remove and properly discard the used battery.
2. Inspect the battery compartment for dirt, moisture and corrosion, and then clean the battery compartment if needed.

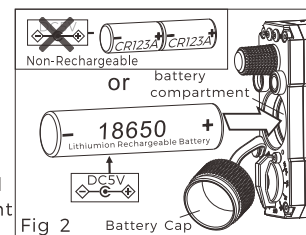


Fig 2

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3. Inspect the O-ring seal on the battery cap to make sure that it is free of sand and dirt particles and that it has not been damaged.

4. Install the battery in a direction marked on the nearby housing and then screw the battery cap in a CW direction.
- 4.2.2 LOW BATTERY INDICATOR**
The flickering Lasers or indicators represent the low battery.
- 4.2.3 Battery Recharging**
Warning: Do not recharge CR123A battery.

The recharging voltage is DC5V and the input side is USB port.

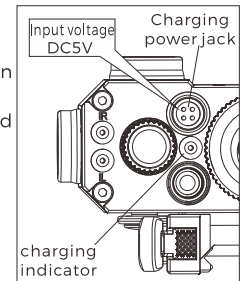


Fig 3

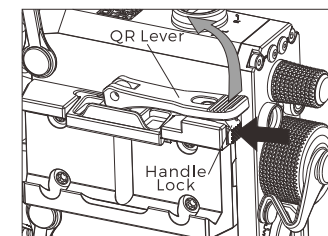


Fig 4

4.3 MOUNTING INSTRUCTION

The repeatability accuracy is less than 2 MOA.

First Use:

1. Use screwdriver to loosen the mount of LS420 in order to install the LS420 on the rail.
2. Open the handle lock and then load the LS420

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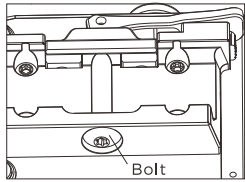


Fig 5

on the picatinny rail.
 3. Latch the handle lock and use screwdriver to adjust the tightness.
 Repeat Use:
 1. Open the handle lock and then load the LS420 on the picatinny rail.
 2. Latch the handle lock.



Fig 6 Mode Selector

4.4 Mode Selector

The LS420 has 10 modes and is set at mode OFF. Please make sure the mode selector is at one of 10 modes and do not locate the mode selector at any position between two modes.

Mode	Description
IRL	Low power IR Pointer will be on when PRESS Fire Switch
VL	Low power Laser Pointer will be on when PRESS Fire Switch
WL	White LED will be on when PRESS Fire Switch
WL/VL	Low power Laser and White LED will be on when PRESS Fire Switch
OFF	No light will be on when PRESS Fire Switch
NOTE: Take off the safety screw and store it on the body if use the modes below	
VH	High power visible laser will be on when PRESS Fire Switch
IRH	High power IR Pointer will be on when PRESS Fire Switch
IL	IR Illuminator will be on when PRESS Fire Switch
IRH/IL	High power IR Pointer and IR Illuminator will be on
WL/VH	High power Laser and White LED will be on when PRESS Fire Switch

The "IR" indicator will be active if the IR pointer is on. The "IL" indicator will be active if the IR illuminator is on.

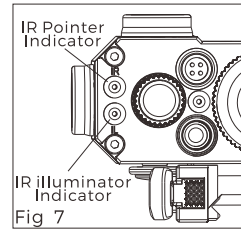


Fig 7

IR INDICATORS

Two green indicators beside the focusing knob, 3 statuses:
 IR indicator ON: when the mode selector is at IRL or IRH position.
 IL indicator ON: when the mode selector is at IL position.
 Both IR and IL indicator ON: when the mode selector is at IRL/IL or IRH/IL.

4.5 SWITCH INSTRUCTION

After choose the output laser via Mode Selector Switch, uncover the lens cover and put it on the magnetic steel. Both Switch Button and Remote Cable Switch can be used to activate the laser under the chosen mode.

4.5.1 SWITCH BUTTON

OPERATION:

- 1) Momentary On Mode: Single press the core of Switch Button and hold it, the laser will be activated and last until the Switch Button was released.
- 2) Continuous On Mode: Double press the Switch Button without holding, the laser

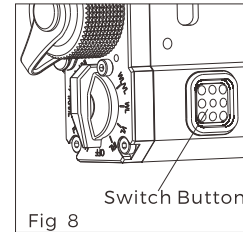


Fig 8

will be activated and last 5 minutes and then automatically turn off. The user also can press Switch Button once to turn off the unit manually.

4.5.2 REMOTE CABLE SWITCH INSTALLATION:

- 1) Uncover the socket cover.
- 2) Insert the plug of Remote Cable Switch into the socket after matching the interfaces of plug and socket.

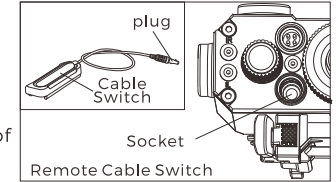


Fig 9

- 3) Screw the protective set of connection part.
- OPERATION: 1) Momentary On Mode: Single press button of Remote Cable Switch and hold it, the laser will be activated and last until the Switch Button was released.
 2) Continuous On Mode: Double press the button without holding, the laser will be activated and last 5 minutes and then automatically turn off. The user also can press Switch Button once to turn off the unit manually.

4.6 WINDAGE & ELEVATION ADJUSTMENT

The Visible laser, IR laser and IR illuminator are concentric hence they could be adjusted by same adjuster at the same time.
 Total travel range is 100 MOA in both directions. Do not adjust the W&E out of the travel range.

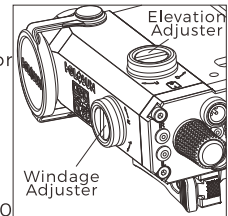


Fig 10

Adjuster	Position	Mark	Direction	Pointer Movement
Elevation Knobs	Top	U	CW	Up
		D	CCW	Down
Windage Knobs	Side	L	CW	Left
		R	CCW	Right

ADJUSTMENT: Use wrench or coin to rotate the adjuster as needed according to the instruction table above.

4.7 FOCUSING KNOB

The focusing knob for IR illuminator is located between the indicators and remote switch in Figure?. The divergence of IR illuminator ranges from 95-210mrad.

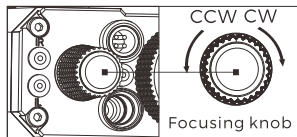


Fig 11

Zoom in: Rotate the knob in CW direction.

Zoom out: Rotate the knob in CCW direction.

5. MAINTAIN

The LS420 is rugged, compact laser device that is designed to operate in severe environments. The exterior housing is made of aircraft grade aluminum and the other components are made of chemically resistant materials that will not be harmed by chemicals normally encountered during military operation. Operator maintenance is limited to the inspection and cleaning of the LS420 external surfaces, replacement of battery before each mission and removal of the battery after each mission.

6. WARRANTY

Holosun will furnish its standard form LIMITED WARRANTY in favor of its customers and the first end users of its products. The LS420 has a one year limited warranty on parts and workmanship from the date of purchase. The warranty is void if the serial number or the manufacturer's labels affixed to the product has been removed or if the product has been misused, modified, neglected or has been disassembled prior to return to manufacturer. To the maximum extent permitted by law, Holosun's election to repair or replace the device shall constitute the purchaser's sole remedy in the event of a defect.

7. NON-WARRANTY INFORMATION

Non-warranty repairs are subject to an evaluation fee. LS420 units that are not covered by the warranty will be tested and evaluated for failure. Customer permission and payment terms will be obtained prior to perform any repairs.

8. RETURN INSTRUCTIONS

- For service, repair or replacement email:warranty@holosun.com, call 909-594-2888
- Please provide the following information to assist technician to determine if the item is repairable:

1. Serial Number of the defective item.
2. Thorough description of the malfunction, defect or damage.
3. An explanation as to how the malfunction, defect or damage occurred, if known.

LS420

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Customer Service

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