

CONTENTS

NOVEMBER 2020 | VOLUME 37 ISSUE 14

DEPARTMENTS

- 6 First Shot
- 8 Know Your Cartridge

COLUMNS

- 10 Behind the Brand JAY PINSKY
- 14 Defensive Handgunning RICHARD MANN
- 16 Hardware Talk PATRICK SWEENEY
- 18 Reloading Bench PHIL MASSARO
- **20** Guns & Gear STAFF REPORT

FEATURES

- 24 Flash 'Em: A Guide to Handheld and Weapon-Mounted Lights.
 PATRICK ROBERTS
- 32 Three Amigos: One Cartridge, Three Guns in .357 Magnum.
 RICHARD MANN
- 40 Rimfire Riflescopes: 10 Top Models for Plinkers, Hunters and Precision Shooters.
- The Fine Line: Using Weapon-Mounted Lasers to Your Advantage.
- More Than Just Triggers: Geissele's Full Lineup ... Including Optics.
- 58 Best Deal in Rimfire: Reviewing CZ's 457 Roster.
 MICHAEL SHEA
- 64 Trijicon RMR Review: From Defensive Pistols to Big Bores.
 PHIL MASSARO

THE BEST GUN LIST IN PRINT

- 72 Show & Auction Listings
- 78 The Gun Digest Marketplace
- 90 Ad Index



COVER IMAGE: PATRICK ROBERTS













Gun Digest the Magazine (ISSN 1938-5943) is published monthly by Caribou Media dba Gun Digest Media, LLC. Corporate Headquarters is 5600 W. Grande Market Dr., Suite 100, Appleton, WI 54913. Periodicals postage paid at Appleton, WI 54913 and at additional mailing offices. POSTMASTER: Send address changes to Gun Digest the Magazine, P.O. Box 460220, Escondido, CA 92046. Copyright © 2020 Gun Digest Media. GUN DIGEST THE MAGAZINE and its logo are registered trademarks. Other names and logos referred to or displayed in editorial or advertising content may be trademarked or copyrighted. The publisher and advertisers are not liable for typographical errors that may appear in prices or descriptions in advertisements.





A guide to handheld & weapon-mounted lights.

ith current events turning everyday life more unpredictable, making good decisions with your personal protection has never been more important. But how do we ensure that we make good decisions when our safety is on the line? Being an effective defender isn't as simple as strap-

ping a big iron on your hip and maintaining awareness. Firearm pro-

ficiency and maintaining a high degree of vigilance is only a piece of the puzzle: You should have *several* options available—beyond harsh words but before switching to guns. Some of the popular less-lethal options include pepper spray, hand-to-hand training or Tasers. I'm an advocate for carrying at least a spicy treat (OC spray, such as Sabre Red), as well as getting some hand-to-hand training.

But there's one non-lethal option that's often overlooked: bright—*really bright*—flashlights.

A LIGHT IS ESSENTIAL

With roughly half of every day being dark, it makes sense to practice shooting in low-light conditions as often as possible, since it presents unique challenges that are often made worse by low-output lights. Sadly, most gun owners don't get an opportunity to hone this vital skill, leaving the importance of a good light paired to a defensive firearm a mystery.

The majority of the blame for this giant gap in training lies with gun ranges that are forced to write range rules around the strict insurance policies available to them. That isn't an excuse to not be proficient shooting your defensive firearms in the dark. There's undoubtedly a training class in your area that should teach you some of the basics and give you some valuable time on a dark range.

PHOTONIC BARRIERS

Positively identifying what someone is holding when they're standing in front of or next to another light source at distances beyond 15 yards can be an eye-opening moment. Your 600-lumen light might be bright, but it might not mean

"usable" depending on how those lumens are projected.

Even though most of my low-light students bring a light with 300 lumens or more, more than half quickly find that the light they brought to class won't overcome the unique challenges faced when shooting in the dark. Photonic barriers like car headlights, bright windows, back lighting, side lighting and gun smoke affect a light's effectiveness and can prevent you from getting enough information to make a good decision.

Try putting accurate shots on a target at 7 yards away in quick succession in low light and you'll quickly realize that a 600-lumen Olight PL-MINI 2 lacks the candela needed to cut through that gun smoke.

NOT ALL LUMENS ARE EQUAL

Comparing light output is a lot easier than it used to be thanks to the ANSI FL1 standard introduced in 2009. Prior to the FL1 rating system, flashlights were marketed with claimed candlepower and LED power consumption ratings. ANSI's FL1 rating means that when you're shopping for a new light, you can compare apples to apples instead of trying to figure out how many watts an LED has to be rated for it to equal the candlepower rating of another flashlight.

> From left to right: Modlite Clicky Tailcap, Modlite Modbutton Lite, Streamlight Tape Switch, Modlite Modbutton, Cloud Defensive, Modlite Modbutton Lite and Streamlight Tape Switch.

LUMENS

The number of lumens a light produces is a cumulative measure of all light being produced by your light. In the case of the ANSI FL1 standard, this is measured with an expensive testing apparatus called an integrating sphere.

While the quality of reflector and lens in your light has a small effect on the lumen rating, it's almost entirely dependent on the amount of light generated by the LED emitter or bulb. Remember that lumen output is only part of the equation, it does not measure how effective the flashlight is at focusing those lumens.

CANDELA

In order to figure out how well those lumens are projected, you need to know what the candela rating of the light is.

Candela is the measure of the amount of light at a particular point in the flashlight beam, which can be measured out to a distance rating.

Candela is most impacted by reflector shape, finish and the placement of the light source in relation to the reflector. At the risk of oversimplifying the complexities of reflector design, the larger in diameter and deeper that reflector is, the more potential it has to produce big candela numbers.

A LIGHT IN THE HAND

Having a light on your gun is dandy, but don't think that means a great handheld light is no longer something you should have. Not only does this mean that the temptation to use your weapon-mounted light as a task light is removed, but a high-output handheld light gives you a lot of flexibility when integrating it into your use of force continuum.

WHAT FEATURES SHOULD IT HAVE?

The single, most important aspect in selecting a handheld light is the physical size of the light. If it isn't something you're going to reliably put in your pocket or purse, that high-octane light saber isn't much help.

When looking at output ratings, select





a light rated to at least 500 lumens and 2,000 candela. While more candela is better, ideally the handheld will be paired with a weapon-mounted light, making its ability to cut through difficult photonic barriers less important for most cases.

Also, look for something that takes a rechargeable battery, because you'll be using this light a lot. Some form of replaceable rechargeable like an 18350, 18650, or even some of the smaller replaceable cells are recommended. Avoid lights with an integrated battery, since rechargeable cells have a finite lifespan.

COMPACT HANDHELDS TO CONSIDER

If you prefer a more lightweight EDC, the Streamlight Macrostream USB is a fantastic light for reasonable money with few downsides. Make sure to keep the Macrostream charged; when the battery is discharged, the light shuts off entirely rather than giving you warning by stepping down brightness.

Still want a small light but need more output? I've been most impressed with Modlite's 18350 PLHv2 handheld. With





1,350 lumens and 54,000 candela, the Modlite handheld is a powerhouse. Make sure to have spare batteries on hand; this light has a 35-minute run time.

FULL-SIZE HANDHELDS TO CONSIDER

Anything that takes a 18650 rechargeable is a good place to start when looking at a full-size tac light, since they generally have a solid runtime and output.

On the budget side, Streamlight's PolytacX is a great light that'll do almost anything you could ask it to do. For a bit more money, the Streamlight ProTac HL-X is a well-rounded light that accepts Thyrm's excellent SwitchBack pocket clip.

In the over \$200 category, you can get a SureFire Duel Fuel handheld or a Modlite PLHv2 handheld. Both are a good choice, but Modlite has significantly more output from the same size light.

PISTOL-MOUNTED LIGHTS

Shooting with a light is a lot easier with both hands on the gun. You can use a handheld effectively with a pistol, but you need to practice the skill. Like the handheld light, we want at least 500 lumens and 5,000 candela for a pistol light. Ideally, you'll buy one that's 600 lumens or more and over 15,000 candela to help defeat those photonic barriers with greater ease.

Also, take into consideration the switches on the light. Rotating switches, like the ones found on the SureFire X300 Ultra or Streamlight TLR-1 HL, are a good bet. Compact lights mean that we have to use a slightly different switch—the Streamlight

TLR-7A is the current king in that realm.

And remember this: You're going to need a holster capable of accommodating the gun and the light.

FULL-SIZE PISTOL-MOUNTED LIGHTS

When looking for a full-sized pistol light, there are two options you should be seriously considering at the time this is being written, SureFire's X300 Ultra and the Streamlight TLR-1 HL. No other lights



The PHLster ARC switches for SureFire X300, and Streamlight TLR-1 HL lights make activating the light a cinch.



on the market have been proven to the level that these have.

Both lights have 1,000 lumens, and both have great candela ratings as well, but they run on the CR123 batteries still. Modlite will be introducing a pistol light that's powered by an 18350 battery, uses their modular head design and will have a good switching arrangement.

COMPACT LIGHTS

Not down with the idea of shoving a giant light into your pants? There's one compact pistol light on the market worth looking at that still meets the requirements for a usable pistol light: the Streamlight TLR-7 series. There are other lights on the market that hit the mark in lumen rating but fall flat when you look at the candela rating. Only one comes close—the Olight Baldr Mini—but since it has an integrated battery with a finite lifespan it might be ideal to stick to lights that allow you to maintain the power source.

RIFLE-MOUNTED LIGHTS

What does a good rifle light need to do? That really depends on your application. The needs of an armed professional are very different than the needs of a suburban homeowner.

Again, look for a light that uses a 18650 or 18350 rechargeable battery, since that'll keep you in the output range we want to see out of a rifle light. It should have at least 1,000 lumens and a candela rating of 10,000 at the minimum. Preferably, get a light with 1,300 lumens or more and north of 25,000 candela to be able to take advantage of the rifle's longer engagement range.

There are some outliers to what I consider to be the minimum, such as the Modlite OKW with only 680 lumens. Yes, that's less than the 1,000-lumen requirement, but the 69,000 candela pairs well with a magnified optic.

SWITCHING

Pressure pads are the most ergonomic and useful methods of activation, but what pressure pad should you choose? If you choose a Streamlight rifle light, you're stuck with the OEM tape switch unless you convert it to take the SureFire plug



RECOMMENDED LIGHTS

HANDHELD

Modlite PLHv2 Modlite OKW SureFire Stiletto Pro SureFire Fury DFT Streamlight Macrostream USB Streamlight ProTac HL-X USB Streamlight ProTac HL USB Streamlight Polytac X USB

PISTOL-MOUNTED

SureFire X300 Ultra 1,000 Lumen SureFire X300 Ultra 600 Lumen Streamlight TLR-1 HL 1,000 Lumen Streamlight TLR-1 HL 800 Lumen Streamlight TLR-7 and TLR-7A

RIFLE-MOUNTED

Cloud Defensive OWL
Modlite PLHv2 (18650 Preferred)
Modlite OKW (18650 Preferred)
Streamlight ProTac Rail Mount HL-X
Streamlight TLR RM 2
SureFire Scout Light Pro Dual Fuel
SureFire Scout Light

with a tailcap adapter from Arisaka.

SureFire ecosystem lights have an advantage in that there are several great switch options in addition to the choice of plug only, or a plug and button combo tailcap. Opt for switch like the brand-new Modlite ModButton Lite, the original ModButton or the Unity Hot Button and get 10 to 15 percent more light output. Choose the option that works best with your rifle and use case.

MOUNTING

Generally, it's recommended to mount the light on the same side as your dominant hand, as close to the rifle as you possibly can. Mounting the light like this gives you the most real estate and prevents the light from getting tangles in a sling. Arisaka's inline scout mount is a great option; also consider mounts from Railscales, Bobro, Impact Weapon Components and Magpul.

CABLE MANAGEMENT

Secure the pressure pad cable with something to prevent it from being pulled out of the endcap. Low-tech solutions like rubber bands or bicycle inner tube are great, or try a purpose-built solution like LaRue index clips.

HOME DEFENSE

Nearly every rifle-specific light from most of the reputable manufacturers is going to do the trick with the exception of Streamlight's TLR RM1, the rifle adaptation of the TLR-7A. Since we're specifically talking about a gun built around short-range defensive uses, I might select a light with more of a flood-style beam pattern rather than the pinpoint beam of a Modlite OKW.

Even though the light had some teething issues, the Streamlight ProTac HLX Rail Mount appears to be bug-free now and is a solid budget option with impressive output numbers. Just a few more dollars and you can move to the SureFire Scout Light Pro Dual Fuel with the integrated M-lok mount.

SHOTGUN LIGHTS

Putting a light on your shotgun is a bit more challenging than other firearms, but it's just as advantageous. Two good dedicated options for a shotgun are the Streamlight TL-Racker or the more expensive SureFire-dedicated forend lights. There are ways to mount handheld and rifle lights to a shotgun, but they don't work as well as a dedicated forend light.

GET A DANG LIGHT

There's no reason that you're carrying a gun and not at least carrying a handheld light in 2020. There are just too many reasons that a high-quality flashlight can be a defensive tool.

Give me all the lumens, but remember that candela is king.

GDTM

Streamlight and SureFire dedicated forend lights are best for a shotgun, but you can make a rifle light work.

