

Pasadena evenings have a certain glow to them already, from the amber porch lights on Craftsman bungalows to the moonlit canopies along the Arroyo. Good landscape lighting does not try to outshine that mood. It adds dimension, draws the eye to architecture and plant structure, and makes walkways safe without turning your yard into a stadium. When homeowners start planning, they usually face a core decision early: low voltage, or line voltage. Each approach has a place in Pasadena, especially with our mix of historic homes, hillside lots, and mature trees. The smartest choice depends on what you want to light, how far you need to run cable, your appetite for disruption during installation, and long term maintenance.

I have installed both systems all over **licensed landscape designer pasadena CA** the San Gabriel Valley. On Michigan Avenue, we lit a century old Craftsman with a low voltage system that disappears into the plantings during the day, then washes the river rock porch piers with a warm 2700K tone at night. In the San Rafael hills, a long switchback driveway asked for tall, architectural bollards that stand up to car lights and the occasional delivery truck. Those fixtures needed line voltage to stay consistently bright over a 250 foot run. Neither project was one size fits all. Here is how to sort yours.

What low voltage and line voltage really mean

Low voltage landscape lighting typically runs at 12 volts, delivered by a transformer that steps down your household power. The fixtures use LEDs that sip power, often 2 to 7 watts per head for path lights and 3 to 10 watts for uplights on shrubs and smaller trees. The cabling is relatively forgiving, installers can make hub or T connections, and buried depth is modest. With the right gauge wire and layout, voltage drop stays in check and the light output is even.

Line voltage means 120 volts delivered directly to fixtures, just like indoor outlets. Installations require proper conduit or approved cable, deeper trenches, junction boxes, and outdoor rated devices on GFCI and with weatherproof covers. Most modern architectural fixtures can be line voltage, and some tall bollards, floodlights for large palms, and wall sconces on masonry columns are designed for this. The runs can be very long without worrying about drop, and dimming can be handled by appropriate controls.

There is also a blended approach. Many Pasadena properties pair line voltage feeds to strategic locations, such as at the end of a long driveway or near a detached garage, then step down to 12 volts with a sub transformer to handle garden lighting in that zone. On sloped yards in La Cañada Flintridge and Altadena foothill properties, this hybrid often keeps trenching manageable while giving flexibility where you need it.

A quick, practical comparison

- Safety and code: Low voltage is inherently safer to handle and friendlier to retrofit in planted areas. Line voltage requires permits and stricter code compliance, with deeper burial and more protective gear.
- Installation disruption: Low voltage typically needs shallower trenches and smaller junctions, so gardens suffer less. Line voltage can mean trenching 18 inches or more and coring through masonry.
- Performance over distance: Low voltage can dim at the far end if wire is undersized or runs are long. Line voltage holds output over long drives, large courtyards, and big hillsides.
- Fixture scale and brightness: Low voltage excels at path lights, small to medium uplights, and niche effects. Line voltage suits tall bollards, high output floods, and integrated architectural fixtures.
- Cost profile: Low voltage is usually more budget friendly to install and expand, especially for garden zones. Line voltage costs more upfront due to labor, materials, and permits, but can be right for specific use cases.

Where low voltage shines in Pasadena

Most residential gardens benefit from 12 volt systems. They are quiet workers that handle the everyday jobs.

Path lighting design for Pasadena front yards is a perfect match. With low wattage LEDs and proper spacing, you can guide visitors from curb to door without glare. For Craftsman and Spanish Colonial homes, I like understated fixtures in antique bronze or flat black that disappear by day and cast a soft crescent on decomposed granite or pavers by night. The goal is rhythm, not a runway. Keep path fixtures 6 to 8 feet apart for gentle pools of light that overlap.

Tree lighting has nuance. How to light mature trees in a Pasadena yard comes up almost every week. For a 20 to 25 foot Chinese pistache or a mature olive, a 5 to 7 watt narrow spot often reaches the lower canopy neatly, while a second, wider beam opens up the mid canopy. For a large coast live oak, which many Pasadena homes treasure, it is not about power, it is about multiple angles and good shielding to avoid glare into the street. I usually use 3 to 4 fixtures at 4 to 7 watts each, placed outside the dripline and aimed to skim along major limbs. Low voltage excels here because you can fine tune beam spreads and placement without heavy infrastructure.

Façade washing on stucco or shingle siding works well at 2700K, which flatters warm materials and red clay roof tiles. Many line voltage wall washers run cooler in tone. In Pasadena's historic districts, that warmer note keeps things authentic. If you prefer a crisper modern read, for example on a newer outdoor kitchen or a Santa Barbara style entry, 3000K can bring out stone texture on a retaining wall without going blue.

Decks, steps, and built ins live happily on low voltage systems. Under cap lights on seat walls or retaining walls, recessed step lights, and tiny niche lights tucked into pilasters tie together an outdoor entertaining space without calling attention to themselves. On properties where clients have built pergolas or outdoor kitchens, we often integrate low voltage tape lighting under countertops, then use small, dimmable 12 volt downlights under the pergola crossbeams. It pairs beautifully with the best outdoor kitchen materials for Pasadena climate, like porcelain countertops and powder coated aluminum, because it avoids heat buildup and UV glare on surfaces.

If you are thinking about water wise landscape design for Southern California homes, low voltage lets you adapt easily as plantings mature or as you add drought tolerant species. California native gardens evolve, especially in the first 2 to 3 years. A Ceanothus can double in size, sages bulk up, and that changes light play. With low voltage, you can re-aim or shift fixtures with minimal disruption. The best California native plants for Pasadena gardens, such as manzanita, toyon, and buckwheat, all respond beautifully to gentle cross lighting that suggests moonlight rather than a spotlight.

Where line voltage earns its keep

There are times when 120 volts just makes sense. Long driveways and large motor courts are one. If you have a 150 to 300 foot approach, particularly in the San Rafael hills or Linda Vista where lots sprawl, line voltage bollards give you consistent output and less worry about dimming at the far end. In high traffic areas, line voltage fixtures often have heavier build quality, thicker stems, and solid anchoring systems that resist leaning from errant tires or soil shift after winter rain.

Tall palms and big reveals sometimes want more punch. A 40 foot to 60 foot Canary Island date palm can eat light. To get the crown alive without blowing out the trunk, you might deploy a pair of narrow beam floods at 1000 to 2000 lumens each. Many of those fixtures are line voltage. They take dimming gracefully with the right control and handle heat better in summer. Near busy street corners, where ambient light competes, line voltage lets you reclaim contrast and keep the composition readable.

Architectural sconces and column lights along a front gate often come as line voltage fixtures. If you are renovating a Spanish Colonial entry with new tile risers and a custom iron gate, chances are the matching lanterns or pier lights are 120 volt. These are statement pieces, the jewelry for the property. Feed them with code compliant wiring in conduit and control them with a photocell and a smart timer. You can still layer low voltage in the garden beds behind them.

Code, safety, and practical install notes

Pasadena follows California building codes and electrical standards. For line voltage, expect permits, inspections, GFCI protection where required, in use covers, and wet location ratings. Conduit depth and cable types have specific requirements that an electrician knows by heart. In gardens, trenching for line voltage can run 18 inches or more depending on method, which means more root disturbance. On historic properties or tight front yards, that matters.

Low voltage installs are typically classified as landscape lighting under separate rules, with shallower burial norms and smaller junction points. Even so, neatness and planning count. Keep connections above grade while testing, then seal them with gel filled connectors and place them where they stay dry. Rodents and gardeners with sharp shovels are your real world hazards. I prefer heavier 12 gauge cable on main trunks, then branch out with 14 gauge to reduce voltage drop. For longer runs, a hub method with equal length leads balances brightness. Aim for no more than 10 percent drop from the transformer to the farthest head.

Near pools, spas, and water features, both systems must respect clearance rules and bonding requirements. The safest move is to keep fixtures several feet away unless they are listed for use near water, and to consult a licensed electrician who knows the specific separations for your setup. Fountains often handle submersible low voltage lights with integrated transformers, which simplifies things.

If your property sits on a slope and you are also dealing with drainage or terracing a sloped yard in the San Gabriel Valley, schedule lighting trenches just after hardscape is formed but before final planting. It saves money and rework. In the La Cañada Flintridge hillsides, we often coordinate conduit sleeves under steps and across retaining wall footings so we do not come back later with a demo saw.

Light quality, color, and glare control

Light quality wins projects, not wattage. For Pasadena homes, 2700K reads as candlelight on stucco and wood. It suits Craftsman, Spanish Colonial, and Monterey Revival beautifully. On drought tolerant landscaping ideas for Pasadena homes that feature gravel, boulders, and blue green agaves, 3000K can crisp edges without going harsh. I avoid mixing color temperatures on the same façade, and I keep paths and faces warm.

Beam control matters as much as color. Narrow beams, 15 to 24 degrees, reach high without washing everything beneath. Wider beams, 36 to 60 degrees, soften hedges and garden rooms. Shielding is non negotiable on front yards near sidewalks. I use cowls and hex louvers to tame glare. On busy streets off Orange Grove, we have to be extra careful, because a stray beam into a driver's eye is not just unattractive, it is unsafe.

Dark sky principles are good neighbors. Aim only what you use. Cap path lights to avoid uplight. Avoid blue heavy sources. If you live near the foothills where night skies still show stars, [outdoor lighting pasadena](#) a restrained plan keeps the neighborhood character intact. Many Pasadena HOAs and historic districts also value restraint, and inspectors appreciate proper shielding.

Controls, smart layering, and energy use

Modern low voltage transformers accept astronomical timers that adjust for sunrise and sunset without fiddling twice a year. You can also split a property into zones for different scenes, for example an early evening welcoming scene on the front path and porch, a late evening low level safety scene on steps and key circulation, and a party scene across the back patio. Some systems dim at the transformer with a control module, others dim at the fixture. Match your hardware, since not all LED drivers dim the same way.



Line voltage systems can run on exterior rated dimmers and smart switches in weatherproof enclosures. If you are already planning smart irrigation systems for Pasadena homes, put the lighting controls in the same central location so Wi Fi and power protection are clean. Lighting draws far less power than people assume. A well designed low voltage system for a front and back yard might total 120 to 200 watts across 25 to 40 fixtures. That is the equivalent of a couple of old incandescent bulbs, spread across a garden, with infinitely better control.

Cost, maintenance, and durability

Numbers vary, but homeowners often ask what to expect. A professionally installed low voltage system for a typical Pasadena yard might run from the mid two thousands to eight thousand dollars, depending on fixture count, quality, and trenching complexity. Larger properties with mature trees and multiple zones climb from there. Line voltage projects add cost for trenching, conduit, junction boxes, and permits. A long driveway with stout bollards frequently lands in five figures.

Maintenance is not heavy, but it is real. Plan on an annual walkthrough after leaf drop or spring growth. Clean lenses, clear mulch off fixtures, adjust aim after pruning, and check seals. LED sources last a long time, often 30,000 to 50,000 hours, but rubber gaskets age in our heat. Ants like warm, dry housings. A small bead of silicone around entry points and good housekeeping keeps trouble down. If you have an irrigation retrofit, such as drip conversion under a water wise planting, make sure emitters do not spray onto fixtures. Hard water spots on lenses cut output quickly.

Real world examples from around town

A South Pasadena Craftsman with a low maintenance front garden needed soft path guidance and a porch highlight. We used six 2.5 watt path lights at 2700K, set 7 feet apart along a decomposed granite path, and two 5 watt wall wash fixtures grazing the porch shingle. A single 150 watt stainless transformer with two zones handles the front and side yard. The clients barely see the hardware by day, and at night the amber wash looks as if it belongs to the original home.

On a Pasadena hillside property with terraced fruit trees and stone steps, the owner wanted safe movement and dramatic tree lighting without glare into neighbors' windows below. Low voltage step lights, every other riser, gave rhythm without hot spots. Three 7 watt narrow spots on a mature olive created a layered crown, each aimed through different branches for depth. To reach a far terrace along a 180 foot run, we fed a small remote transformer from a line voltage conduit laid during the retaining wall build. That hybrid kept voltage drop under control and spared the citrus roots.

For a San Rafael Spanish Colonial with a 220 foot driveway, the architect chose 42 inch line voltage bollards, powder coated to match the gate ironwork. We ran conduit along the drive edge before paving, then set each bollard on a concrete pier with a hidden junction. A photocell and a weather rated dimmer let the owners set the brightness lower on quiet nights. In the garden beds, all accent lighting is low voltage. The blend reads seamless, and the maintenance is straightforward.

Design notes for specific home styles

Outdoor lighting that complements Craftsman and Spanish Colonial homes leans warm, subtle, and textural. Craftsman details, such as river rock foundations and exposed rafter tails, reward grazing light from below the eave or from the side. Spanish façades love a slow, even wash across stucco and tile. Avoid placing a single spotlight dead center on a wall, which flattens the texture. For both styles, let lanterns and sconces carry the strongest visual statement at entries. Garden lighting should support, not compete.

If your project includes hardscaping, from a new paver patio to retaining wall design for Pasadena hillside properties, think about lighting during planning. The best hardscape materials for Southern California homes, such as porcelain pavers and natural stone, respond differently to light. Porcelain reflects more, stone drinks the beam and gives soft shadow. How to choose pavers for a Pasadena patio includes thinking about night use. A slightly textured surface can be safer under low light. If you are debating paver patio vs concrete patio, pavers often offer easier retrofit for wiring under joints if you decide to add low voltage later.

Planning moves that keep you on track

- Decide what you want to see, not just what you want to light. Prioritize wayfinding, key architecture, and two or three specimen plants.
- Match color temperature to materials. Warm for wood, brick, and stucco. Slightly cooler for succulents and stone sculptures.
- Walk the property at night before you buy. A flashlight test, with your hand making an impromptu shield, reveals beam and glare issues.
- Size the transformer with headroom. Total your fixture wattage or VA, then add 20 to 30 percent for future tweaks.
- Build in zones. Separate front curb appeal, circulation safety, and backyard entertaining so you can dim or shut off independently.

How this choice fits a bigger landscape plan

Landscape lighting is one thread in a larger fabric. If you are starting a project from scratch, the best time to start a landscaping project in Southern California is late fall through early spring. Cooler weather lets new plants root, and contractors can trench without baking soil into concrete. That timing also syncs with irrigation planning. Best irrigation tips for Los Angeles climate include pressure regulating heads, drip on shrub beds, and smart

controllers that adapt to weather. Lights and irrigation need to coexist. Avoid running wires and drip lines in the exact same trench. Stagger them or sleeve crossings so a future repair does not take both systems down.

For a drought tolerant design, the lighting touch gets lighter. The best drought tolerant trees for Pasadena yards, like crape myrtle and mesquite, want airy uplighting that respects their open structure. California lilac care in Pasadena gardens includes letting the plant keep its natural shape, so light it from the side with a wide beam and keep lumbar low. A water wise garden will also change seasonally. In spring, flowers pop, and you might bump output on a zone to enjoy it. In summer, you dim back to accent the structure. A low voltage system handles this gracefully.

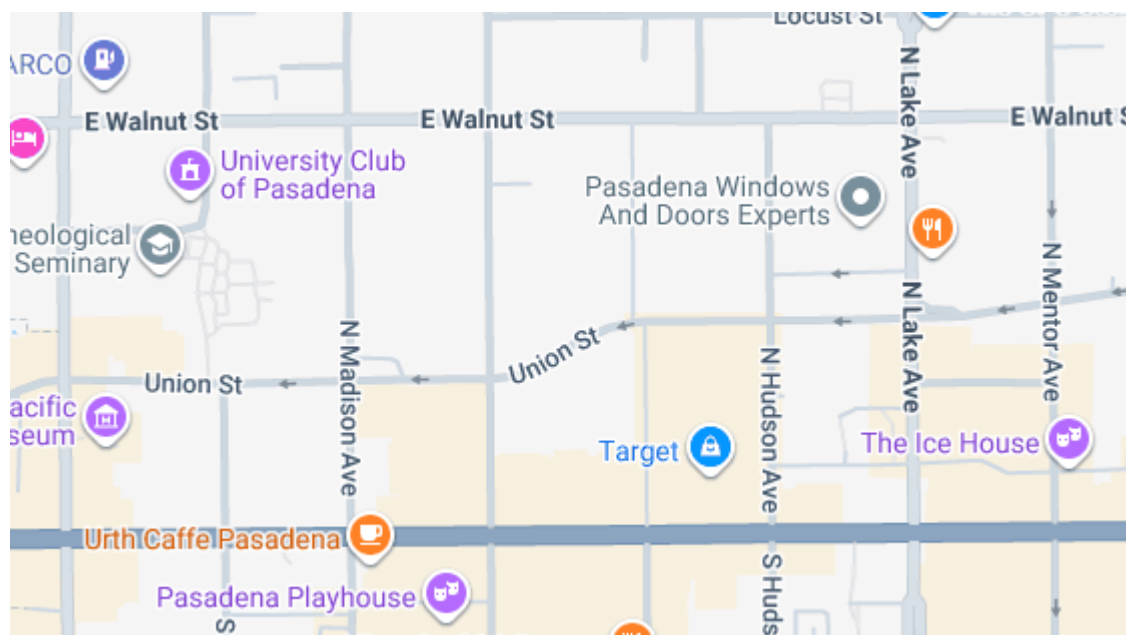
If your property falls in a wildfire sensitive area near the foothills, wildfire smart landscaping matters more than any light choice. Keep flammable mulch back from the house, limb up trees, and avoid placing fixtures so close to leaf litter that they trap debris. Modern LEDs run cool compared to old halogens, but good housekeeping is still part of safety.

Choosing between the two for your property

Think about distance, scale, and style. If your garden focus is intimate, with meandering paths, native plant beds, and a couple of mature trees, low voltage almost always wins. It will be easier to install, gentler on roots, and simpler to tweak as the garden grows. If you have long runs, tall architectural fixtures, or need to light very large vertical elements, line voltage or a hybrid begins to make sense.

Budget and disruption are real. A family in Sierra Madre wanted to refresh their yard and asked how to plan a landscape renovation for your Pasadena home in a way that did not tear everything up. We phased the work. First, utilities and sleeves went in with new hardscape. Next, low voltage for the garden. Months later, after the plants settled, we added a few more heads and re-aimed. If they had chosen line voltage for the garden zones, we would have had to rip more beds open. Not worth it for their goals.

If you are working with a hillside, you need to factor in retaining walls, drainage, and erosion control. Hillside landscaping ideas for Pasadena and La Cañada Flintridge often integrate step lighting and low voltage accents on terraces, then reserve line voltage for driveway or street edge markers. The best retaining wall materials for Pasadena hillside homes, such as engineered block or stone with geogrid, give you a stable backbone and a chance to embed conduits during construction. Planning ahead saves pain.



A few last specifics that pay off

Aim lower wattage fixtures closer to the subject rather than blasting from far away. You will get richer texture, less spill, and better efficiency. For front yard paths, stagger sides but avoid perfect symmetry on every fixture. Nature does not march in lockstep, and neither should your lights. For large trees, avoid the temptation to flood the crown in all directions. Let parts fall into shadow. Your eye loves suggestion.

When sizing transformers, look at volt amp ratings since some LED drivers care about VA more than watts. A 5 watt lamp might draw 6 or 7 VA. Add everything up honestly and give yourself margin. Place the transformer where you can hear it, believe it or not. A quality unit is quiet, but if something begins to hum loudly years later, you will want to know before it fails.

For Pasadena's style palette, think of lighting as a way to honor the architecture. Craftsman bungalows appreciate gentle reveals at rafter tails and knee braces. Spanish Colonial homes crave soft stucco grazes and lantern hierarchy. Midcentury homes on the west side of town enjoy crisp uplights on vertical planes and sculptural cactus shadows. Outdoor lighting ideas for Pasadena homes work best when they speak the same language as the house.

If you are still undecided

Walk your property at dusk with a simple plan. Stand at the curb and list the three things you want a passerby to notice. Go to the front door and think about safety spots on your way to the street. Sit in the backyard where you gather with friends and picture the pool of light you want on the table and the glow beyond, not too bright, just enough to frame the night. If those scenes are intimate and within 100 feet of a practical transformer location, low voltage will serve you well. If you keep bumping into a long drive, very tall features, or architect selected line voltage fixtures, plan for a blended system.

Pasadena offers a rare mix of heritage and climate, which means you can be outside a lot of the year. Lighting should make that easy, not fussy. Choose the voltage that matches your scale and your story, then let the garden, the home, and the San Gabriel sky do the rest.