

LOW VOLTAGE



Landscape Lighting



BUYER'S PLANNING GUIDE

www.homedepot.com

Professional Results In Less than an Hour

- Warm, inviting illumination
- Energy efficient lighting – just pennies-a-day
- Choose a lighting kit that includes everything you need
- Or, customize with your choice of fixtures, power pack and cable



About Low Voltage Lighting

Low Voltage Lighting

Low voltage outdoor lights are used to highlight architectural features and landscaping details, making your home and yard safer and more beautiful at night. Low voltage lights can be combined with solar lights for a complete landscape lighting system.

Installing a low voltage lighting system is easy and makes a great do-it-yourself project for any homeowner. It is completely shockless and safe for use around children and pets.



The low voltage lighting system consists of three parts:

- 1. Power Pack (transformer) — supplies the electricity
- 2. Low voltage cable — transmits the electricity
- 3. Low voltage lamp — the source of light

The Power Pack plugs into a standard outlet, reducing the regular household current (120 volts) to a safe 12 volts AC and has an automatic timer allowing lights to go on and off at preset times. The cable is a weather-resistant, self-sealing, insulated stranded copper wire that is available in 16, 14, and 12-gauge sizes. The final component, the lamp, offers greater economy than a conventional 120-volt lamp.

Advantages

	Low Voltage
Brightness	Produces a bright, white pool of light
Light Output	Fixtures produce more usable light
Power Source	12 volt Power Pack plugs into standard receptacle
Ease of Installation	Usually under an hour using standard tools
Energy Efficiency	Costs only pennies a night to operate

Frequently Asked Questions

Low Voltage

Q. How many lights can I add to my Malibu System?

A. Add lights as desired keeping total bulb wattage at or below the power pack rating.

Q. Can I mix bulb wattages?

A. Yes. You can have a variety of bulb wattages, allowing for flexibility in your lighting system. As you add fixtures of different wattages, be sure the total watts in the system does not exceed the power pack rating.



Q. What if total bulb wattage exceeds my power pack rating?

A. Malibu offers several power pack models with different wattage ratings. You could add a second power pack, splitting the load between 2 power packs, or purchase a power pack with a wattage rating high enough to handle the entire load.

Q. What type of power receptacle should I plug my power pack into?

A. An outdoor, 120 volt (standard U.S. household current) power outlet with a GFCI (ground fault circuit interrupt) receptacle is required. This receptacle should also utilize a while-in-use weatherproof cover, designed to protect the plugs that are in it.

Q. Can you connect a power pack to an electrical outlet with an extension cord?

A. No. Extension cords should not be used. Mount the power pack within 1 foot of a covered outdoor GFCI AC outlet.

Q. Do I need to bury my low voltage cable?

A. No. Exposed cable is weatherproof and shockless. However, for better appearance, hide cable with mulch, rocks, etc.

Q. Do I need to tape or seal the end of the cable?

A. No. Simply straight-cut exposed wire so it is flush with the insulated covering.

Choose Fixtures That Suit Your Needs

Downlighting

- Enhances safety
- Place along walkways and steps
- Outline driveways
- Mark garden paths and flower beds
- Accent patios and decks



Uplighting

- Create a focal point
- Highlight small trees and shrubs
- Illuminate fountains and garden statuary

Backlighting

- Enhances security
- Accent trees and bushes
- Illuminate walls and fences
- Light up your home's exterior



Installation is Easy

1. Install the Power Pack

- Mount the water resistant Power Pack outside in accordance with the instructions.
- Do not use extension cords.
- Install first fixture a minimum of 10 feet from the Power Pack.



2. Install the Cable

- Connect the cable to the Power Pack.
- Turn on the Power Pack to ensure that the fixtures are working as you proceed.
- Lay out the cable according to your lighting plan.

3. Connect Fixtures to Cable

- Connect the fixtures using the connectors supplied with each fixture.
- For a cleaner look, cover the cable with mulch or soil.



Choose Your Light Fixtures

New LED Low Voltage Lights

LED lights utilize the most efficient lighting technology on the market today. Available in floodlight and fashion designs for a variety of applications and tastes.

Features:

- Energy efficient warm white light
- Use less energy than standard lights
- LED's never need replacing

Premium Cast Metal Lights

Elegant fixture styles are available in distinctive metal finishes. Some may include: Architectural Bronze, Antique Copper, Verde and Black. Our most durable, heavy duty lights have a lifetime warranty.

Features:

- Heavy duty, durable metal construction
- Commercial grade, used by landscape architects
- Wedge base and halogen bulbs

Metal Lights

These fixtures are available in a wide variety of traditional and contemporary styles, designed to fit in any custom lighting system plan. Available in a variety of colors and finishes.

Features:

- Heavy duty, non-corrosive metal that won't rust
- Wedge base and halogen bulbs

Plastic Lights

These dependable, economical outdoor landscape lights are constructed of weather-resistant materials and are safe and easy to install.

Features:

- Heavy duty, polymer materials construction
- Energy efficient 4W bulbs

Applications

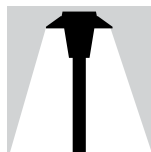
Fashion Lights

General use for gardens, shrubs and driveways



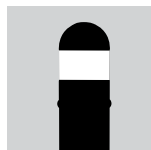
Down Lights

Illuminate paths, walkways, low lying ground cover



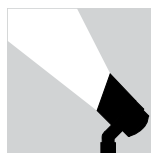
Markers

Low-profile fixtures to line paths and plant beds



Floodlights

Highlight trees and architectural features



Surface/Deck Lights

Add beauty and safety to decks, walls, steps and fences



Choose the Right Power Pack

Determine the Power Pack You Require:

- Choose your fixtures, in any combination, according to your plan.
- Add up the individual bulb wattages of all the fixtures in your system.
- Choose a Power Pack that is large enough for your system. 45, 120, 200, 300, 600 and 900 watt Power Packs are available.

Example:



NOTE: When necessary, divide large systems into 2 or more smaller systems using additional Power Packs. In which case, total only the bulb wattages for each fixture within each smaller systems to determine the correct size Power Pack needed for each smaller system.

Determine Your Cable Size

Use the planning grid on pages 10 and 11 to complete your cable layout plan. Count or measure the 1/8" scaled blocks to determine the total feet of cable needed for your lighting systems. Also measure your longest runs. The chart above will tell you the correct size cable to use, depending on the length of your runs.

Total Nominal Wattage of Power Pack	Maximum Recommended Cable Length (feet) at Full Load		
	16 Gauge Cable	14 Gauge Cable	12 Gauge Cable
45	100	*	*
120	75	100	125
200	Do Not Use	75	100
300	Do Not Use	Do Not Use	75
600	Do Not Use	Do Not Use	75 each circuit
900	Do Not Use	Do Not Use	75 each circuit

* – cable conductors may not fit in power pack terminals

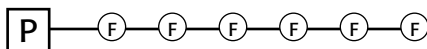
Choose Low Voltage Cable

Cable Layout Options:

- After you have determined the location(s) of your Power Pack(s) and fixture positions, draw lines on your plan to indicate your runs.
- Keep your runs as short as possible by avoiding any unnecessary backtracking.
- Use the following diagrams to help you draw the most efficient layout for your lighting plan.
- Use cable connectors (8150-9801-01) to quickly join 2 or more shorter cables, or change run direction. On runs over 50 feet or when 10 or more lamps are connected to one line, use 12 gauge cable, which will reduce voltage drop and produce greater efficiency from the lamps.

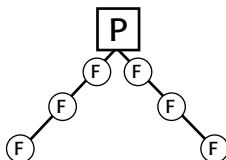
A. Series Installation

Most common.



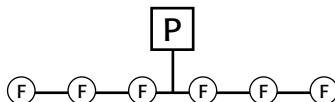
B. Split the Load

Run up to the recommended maximum distance in two or more directions from the Power Pack.



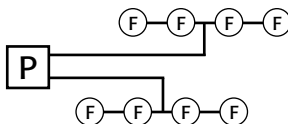
C. Tee Method

Allows more even distribution of power to the center of a run or to a run some distance off, i.e. across a driveway. Heavier gauge cable (10 or 12 gauge) or a double run of cable should be used to make the tee. All cable to cable connections should be soldered.



D. Split Tee

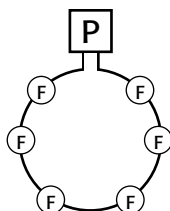
Allows relative uniform distribution of power to both legs, i.e., to both sides of the yard. Otherwise, the layout is the same as B.



E. Loop Installation

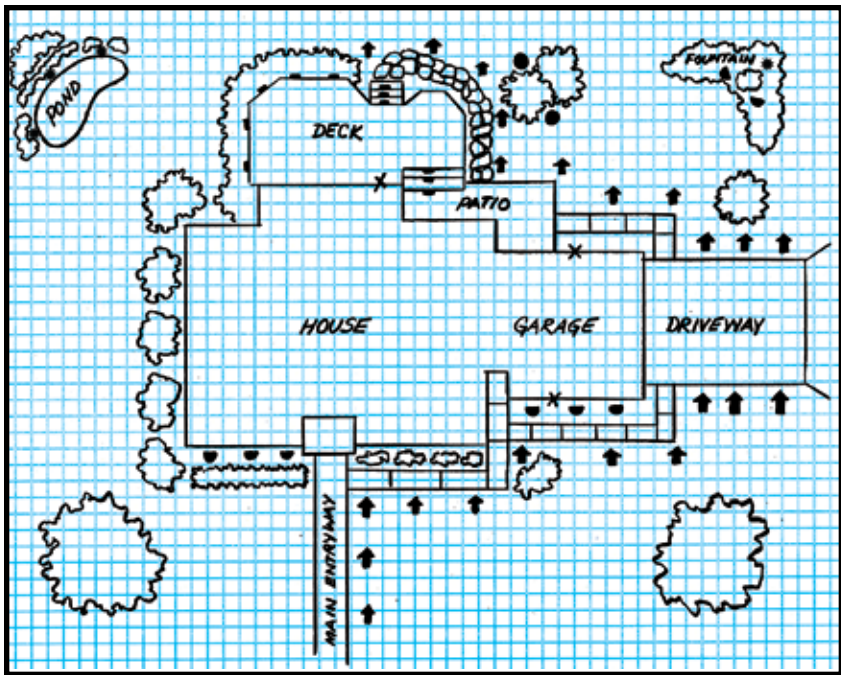
Allows for relatively uniform light output.*

* Polarity note: Please observe cable polarity when using "loop" installation.



Make a Lighting Plan

1. Identify the elements and areas you want to light.
2. Select the proper fixtures, depending upon function and style.
3. Total the wattage of the selected fixtures.
4. Select a Power Pack based on the total wattage of your fixtures.
5. Select the length and gauge of cable required for your plan.



▲ TIER LIGHT/
WALKLIGHT

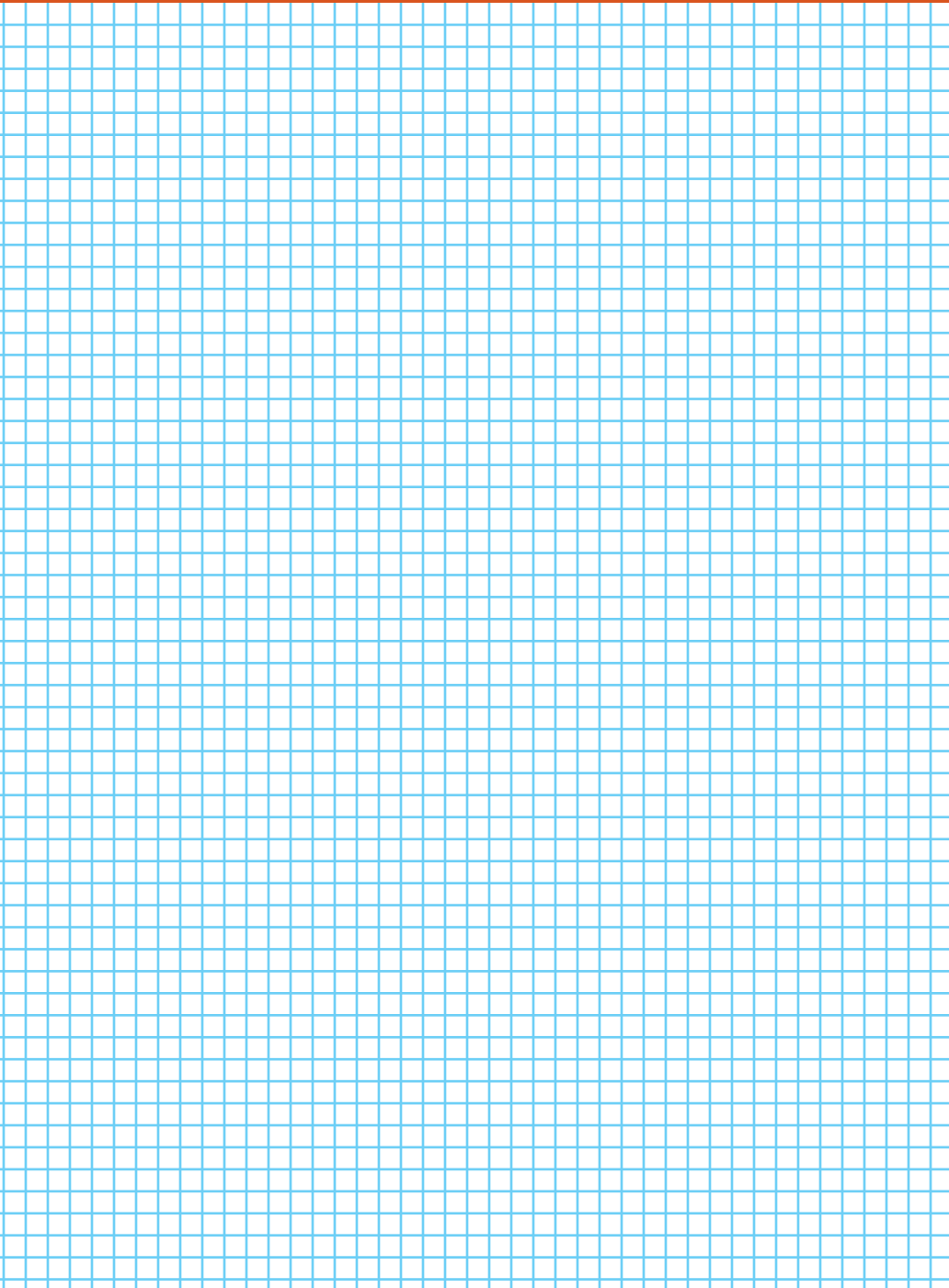
▼ FLOOD
LIGHT

■ SURFACE
LIGHT

● UPLIGHT/
WELL LIGHT

✕ OUTDOOR
RECEPTACLE

**USE THIS GRID TO DRAW YOUR LIGHTING PLAN.
SCALE: 1/8 INCH = 1 SQ. FOOT**



Low Voltage LED Lighting

Lámparas de bajo voltaje LED



LED Lights

Lámparas LED



8406-9111-01
694-699

Oil Rubbed Bronze
Bronce ennegrecido

1W LED – as
bright as 7 Watt
Incandescent bulb

LED de 1 Watt , tan
brillante como una
bombilla incandescente
de 7 Watts



8405-9112-01
694-765

Tarnished Copper
Cobre deslustrado

1W LED – as
bright as 7 Watt
Incandescent bulb

LED de 1 Watt , tan
brillante como una
bombilla incandescente
de 7 Watts



8401-9203-01
512-544

Black • Negro

1W LED – as
bright as 7 Watt
Incandescent bulb

LED de 1 Watt , tan
brillante como una
bombilla incandescente
de 7 Watts



8401-9303-01
513-284

Black • Negro

2W LED – as
bright as 7 Watt
Incandescent bulb

LED de 2 Watt , tan
brillante como una
bombilla incandescente
de 7 Watts



8401-9403-01
515-390

Black • Negro

1W LED – as
bright as 7 Watt
Incandescent bulb

LED de 1 Watt , tan
brillante como una
bombilla incandescente
de 7 Watts



8401-9513-01
515-452

Black • Negro

7W LED – as
bright as 20 Watt
halogen bulb

LED de 7 Watt , tan
brillante como una
bombilla halógeno
de 20 Watts



8401-9613-01
515-459

Black • Negro

7W LED – as
bright as 20 Watt
halogen bulb

LED de 7 Watt , tan
brillante como una
bombilla halógeno
de 20 Watts



8401-9607-01
695-392

Black • Negro

2.5W LED – as
bright as 10 Watt
Incandescent bulb

LED de 1 Watt , tan
brillante como una
bombilla incandescente
de 10 Watts

Low Voltage Lighting

Iluminación de bajo voltaje



Garden Lights

Lámparas de jardín



8301-9200-01
320-492
11W
Black • Negro



8302-9200-01
504-138
11W
Copper • Cobre



8303-9200-01
532-729
11W
Sand • Arena



8301-9202-01
400-917
7W
Black • Negro



8301-9204-01
515-621
4W
Black • Negro



8308-9109-01
544-955
18W
Aged Brass
Latón Envejecido



8302-9107-01
329-992
18W
Antique Copper
Cobre Antiguo



8307-9100-01
695-722
11W
Weathered Bronze
Bronce Resistado



8306-9104-01
595-996
11W
Oil Rubbed Bronze
Bronce Ennegrecido



8303-9106-01
505-324
11W
Sand • Arena



8304-9105-01
486-337
11W
Verde
Verde Cepillado



8308-9103-01
283-512
10W
Aged Brass
Latón Envejecido



8305-9102-01
694-930
7W
Copper Finish
Cobre Deslustrado



8310-9110-01
694-501
7W
Dark Rust
Óxido Oscuro



8301-9114-01
515-646
4W
Black • Negro

Low Voltage Lighting

Iluminación de bajo voltaje



Garden Lights

Lámparas de jardín



8301-9300-01
622-744
20W Halogen
Halógeno
Black • Negro



8303-9300-01
504-676
20W Halogen
Halógeno
Sand • Arena



8301-9301-01
813-543
10W Halogen
Halógeno
Black • Negro



Floodlights

Luces de inundación



8301-9601-01
545-292
50W Halogen
Halógeno
Black • Negro



8302-9605-01
695-458
35W Halogen
Halógeno
Antique Copper
Cobre Antiguo



8303-9606-01
107-512
35W Halogen
Halógeno
Sand • Arena



8308-9603-01
695-161
20W Halogen
Halógeno
Aged Brass
Bronce Envejecido



8301-9604-01
545-768
20W Halogen
Halógeno
Black • Negro



8301-9602-01
101-111
20W Halogen
Halógeno
Black • Negro



8301-9608-01
515-626
4W
Black • Negro



8301-9500-01
127-422
35W Halogen
Halógeno
Black • Negro



8303-9500-01
931-984
35W Halogen
Halógeno
Sand • Arena



8301-9501-01
796-119
20W Halogen
Halógeno
Black • Negro

Low Voltage Lighting

Iluminación de bajo voltaje



Deck Lights

Lámparas para terraza



8301-9400-01

276-609

7W

Black • Negro



8302-9400-01

487-029

7W

Copper • Cobre



8300-9401-01

598-986

7W

Copper, Black
Cobre, Negro

Sets & Kits

Conjuntos y kit



8400-9906-06

695-689

1W, 2.5W,
40W Power Pack

Transformador
Oil Rubbed Bronze
Bronce Ennegrecido
Black • Negro



8400-9905-06

690-244

1W, 2.5W,
40W Power Pack

Transformador
Tarnished Copper
Cobre Deslustrado
Black • Negro



8300-9901-06

694-204

7W, 20W,
150W Power Pack
Transformador
Black • Negro



8308-9903-01

693-313

10W, 20W,
150W Power Pack

Transformador
Aged Brass • Latón Envejecido



8301-9900-04

117-424

50W,
300W Power Pack

Transformador
Black • Negro



8301-9908-10

516-157

4W,
45W Power Pack

Transformador
Black • Negro

Sets & Kits

Conjuntos y kit



8301-9904-04
501-504
20W,
121W Power Pack
Transformador
Black • Negro



8301-9902-08
695-557
20W,
200W Power Pack
Transformador
Black • Negro



8301-9907-08
696-250
7W, 20W
150W Power Pack
Transformador
Black • Negro

Power Packs

Transformadores



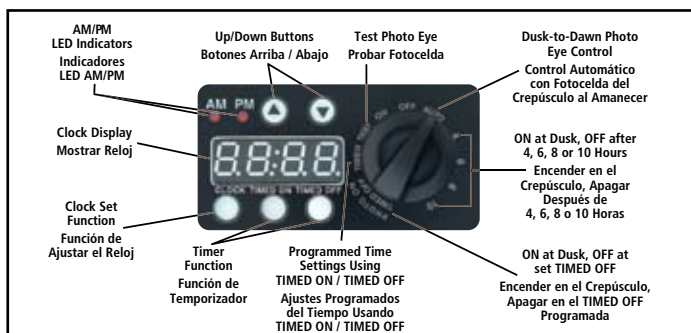
8100-9045-01
244-227
45W
Black • Negro



8100-9120-01
843-007
120W
Black • Negro



8100-0200-01
843-054
200W
Black • Negro



8100-9300-01
455-612
300W
Black • Negro



8100-9600-01
807-764
600W
Black • Negro



8100-9900-01
442-972
900W
Black • Negro