

PAVER BRIGHTS™

PAVERBRIGHTS.COM

Installation Instructions

Please read all the instructions provided before beginning installation.

You must visit paverbrights.com for most current installation and warranty information.

The following instructions apply to all sizes of both Gems and Ambiance by PAVER BRIGHTS.

Accessories required for installation

- Outdoor 12V DC Landscape Lighting Transformer (properly sized)
- 12/2 or 10/2 Low Voltage Direct Burial Cable (see Voltage Drop Chart)
- Direct Burial/Waterproof Connectors
- PaverEXTRACTOR (optional)
- Wire Cutters/Strippers
- Hammer/Mallet
- 24" long 2x4

NOTE:

- Paver Brights **MUST** be installed on top of bedding sand; otherwise damage to the wiring could occur (see Limited Warranty).
- To prevent scratching, do not run a plate compactor directly over the lights.
- **Do not apply any sealer over Paver Brights**

Step 1

Determine where the Paver Bright(s) and transformer will be located and measure the perimeter of the project (if lights are to be installed in the soldier course) to determine the amount of low voltage wire required. Make sure to add enough cable to reach the transformer when it is mounted at the recommended height (see transformer instructions). Add one foot of cable for each Paver Bright being installed to the final calculation.

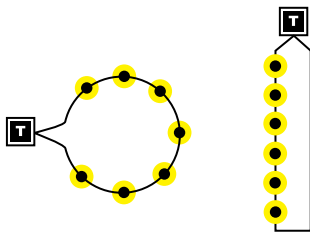
Step 2

Determine which installation layout of the cable will work best for the project.

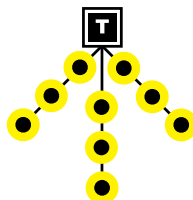
1. **Straight run** - Fixtures run in sequence directly from the transformer.



2. **Loop** - Fixtures are arranged in a looped circuit, reducing the effects of voltage drop.



3. **Split load** - Run up to the recommended maximum cable length in two or more directions from the transformer. Locating the transformer in the center of the run reduces the effect of voltage drop.



Step 3

Once the bedding sand has been screeded, lay the low voltage cable on top of the sand where the soldier course and Paver Brights will be installed. Allow roughly 1 ft of excess cable at each predetermined Paver Bright location. Make a loop at each of the locations, which will allow easy access when it is time to connect the cables. With only the low voltage cable installed, complete the paver installation following guidelines set forth by the Interlocking Concrete Pavement Institute (icpi.org) or Brick Industry Association (bia.org).



Step 4

With the pavement complete, place Paver Brights near the predetermined locations according to the plan design. Mark the pavers that will be replaced with Paver Brights. Using a PaverEXTRACTOR (recommended), or a pair of screwdrivers, extract the marked paver, as well as the adjacent soldier pavers. Extracting two pavers from one of the sides will allow for more room to work.



Step 5

Cut the cable where the Paver Bright will be installed. Separate both cables and strip off 3/4" of insulation.



Step 6

It is important to connect the wires correctly. Determine if the "ribbed" or "smooth" strand will be your Positive (+) 12V. Make sure that same strand is connected to the Positive wire on every bulb. To ensure a strong connection, group all the positive wires together and twist together in a clockwise direction. **WARNING:** Connecting your wire anyway other than instructed, could result in loss of power to one or all lights.



Step 7

Insert the wire bundle into the Waterproof Connector and twist clockwise until it is hand tight. Some silicone may come out of the bottom of the connector. Repeat the same steps for the negative wires.

Step 8

Press the wires and connectors into the bedding sand. Touch-up the bedding sand if necessary. Lay in the Paver Bright(s) along with the extracted pavers.



Step 9

Check to make sure the top of the Paver Brights will sit slightly lower than the surrounding pavers once compacted. If it is too high, remove excess bedding sand, before relaying the light.

Step 10

Connect the low voltage cable to the transformer and test.

Step 11

The extracted pavers will need to be re-set into the bedding sand. Place a 24" long 2x4 across the pavers needing to be re-set. Tamp across the pavers with a hammer/mallet, until the pavers are flush with the rest of the pavement. Once completed, your Paver Brights should still be sitting lower than its surrounding pavers.



Step 12

After all the Paver Brights have been installed, sweep sand back and forth over the installation areas to refill the joints. If using stabilized joint sand, make sure the tops of the Paver Brights are completely clean before activation.

Step 13

Once the lights are installed, re-test the transformer. If everything is working correctly, cover the low voltage cable leading from the pavement to the transformer with mulch or bury it in the soil.

DC Voltage Drop

DC transformers have a maximum wattage of 60 Watts per circuit without requiring hard wiring into electrical line.

The DC Voltage Drop Chart shows how long each gauged wire can be run before voltage loss becomes significant. Make sure that each line being run has no more than what your transformer can power. If too many lights are connected, your lights will not work. Use this example when calculating what transformer size your project will require.

Maximum Cable Length per Transformer

	40W	50W	60W	80W	100W	150W	200W
10/2 Gauge	219'	175'	146'	109'	87'	58'	43'
12/2 Gauge	139'	99'	91'	69'	55'	36'	27'

Example

The project entails Twenty-Five (25) 4x8 **Gems by Paver Brights**, which will total 50 watts. To calculate what size transformer you need, multiply the total wattage by 1.1. That will give you the required size transformer the project requires.

$$50 \text{ (total wattage)} \times 1.1 = 55 \text{ Watt transformer}$$