

# HauntMaven.com - Wolfstone's Haunted Halloween Site



[http://wolfstone.halloweenhost.com/HalloweenTech/dimbox\\_DimmerBox.html](http://wolfstone.halloweenhost.com/HalloweenTech/dimbox_DimmerBox.html)

## How to Make a Dimmer Box

In the past, we had lit our tombstones with Malibu-brand landscape lighting. There is a large transformer, and wiring that snakes wherever you want it. Then you tap into the wire, placing low-voltage lamp fixtures wherever you want. We used a variac on the input to the Malibu transformer to dim the lights. This was effective, but a bit unwieldy.

We wanted a simple and cheap way to sprinkle lights here and there, preferably using modular components that could be used in other places. Since we were already running 110 VAC in the graveyard to power the props, stake lights running on house current wouldn't need any additional wiring.

All we needed was a way to dim them...



## Basic project



The complete dimmer box gets power from a standard three-prong plug. It has two sockets to feed your lights, and a knob to set their intensity.



Removing the cover plate, we see a standard two-outlet electrical receptical.

The light is controlled by a common lamp dimmer, the same kind that you might mount in the wall to control a permanent lamp fixture. The only trick is that we have mounted it in a metal box to make a portable unit.

Lamp dimmers come in various power ratings (Wattage). The beefier the dimmer, the more lamps (and more powerful lamps) you can run off of one unit.

You have numerous options in the actual dimmer to use in this project. In general, we suggest:

- Rotary or slide doesn't matter to operation, but it will be easier to find a dual cover plate that fits a rotary dimmer.
- Just about anything you find is rated 600W. The next step up in wattage will be expensive.
- There are some really good deals out there, like the Leviton 6681 for \$4.98.
- We like dimmers that also have a seperate on/off switch. This allows you to preset your lamp level.

We dropped in to [Home Base](#) in southern California (January 2002), and found some units that look like they will work:

<u>make</u>	<u>model</u>	<u>price</u>	<u>wattage</u>	<u>features</u>
Leviton	611-6621	\$9.88	600W	slide
Lutron	S-600H	\$11.90	600W	slide
Leviton	604-6631	\$19.95	600W	slide, rocker switch, light
Lutron	S-600PH	\$16.80	600W	slide, rocker switch
Lutron	S-10P	\$52.90	1000W	slide, rocker switch
Lutron	GL-600H	\$9.97	600W	slide

Lutron	D-600PH		600W	rotary, push on/off
Lutron	DNG-600PH	\$7.97	600W	rotary, push on/off, lighted
Leviton	6602	\$3.98	600W	rotary
Leviton	6681	\$4.98	600W	rotary, push on/off
Leviton	602-6631	\$18.95	600W	slide

The wiring is simple:

- connect all of the grounds together: green wire from the power cord, green wire from the dimmer, green screw on the outlet
- connect the neutral (white wire) from the incoming power to the outlet (one side should be marked "white wire")
- connect the hot (black wire) from incoming power to the dimmer
- connect the other end of the dimmer to the outlet (one side should be marked "black wire")



The wiring is clear enough....



We chose to mount the whole thing in a metal electrical box; the kind normally used in building construction.

These boxes are meant to be flexible in what gets hooked in and out. All around the side are partially punched holes. In order to use a hole, you knock out the remaining bit of metal.

Once the hole is empty, you mount a clamp that protects the cord and keeps it from getting strained.



The stake lights and dimmer make a nice combination.

You can plug two fixtures straight into the dimmer box; more with a power strip or cube tap. Just make sure that you do not exceed the rated capacity of the lamp dimmer that you used in the box.

## Variations

There are plenty of variations that can be played on this theme:

- Build a poor-man's lighting console by using a larger box and putting in numerous dimmer circuits.
- Having a switch is good because it allows presets, but the push on/off tends to make a loud "click". If soundless operation is important, consider using a cheaper dimmer without a switch, and adding a "silent" toggle switch to the circuit.
- A sufficiently large prop, like a column or pillar, can have a dimmer built into it, for use on lighting that is attached or nearby.

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