

GUERRILLA PROJECTIONS

Guerilla projections have become a popular, practical, and sometimes spectacular way to put forward a political message. Whether it be virtually re-installing a labor mural in Maine, tagging a state capitol building with a “For Sale” sign in Wisconsin, or throwing up a “Bat Signal” on the Verizon building in New York City, projections have proven to be an effective and often inexpensive way to broadcast inspirational ideas and enhance planned actions.

This guide provides some basic information about projections and projectors, and links to online resources that will be helpful for research.

As the #occupy movement moves forward we hope that projections will be used to spark new dialogue and spread important ideas for how to challenge and transform entrenched power.

PROJECTOR FACTS

A projector’s brightness is measured in lumens. The more lumens, the brighter the projector. Typically for outdoor projection, a projector should have at least 3000 lumens. The brightness of a projection will be diminished by ambient light on the projection surface. The 99% “bat signal” was projected using a 12,000 lumen projector, but less powerful projectors can still have a terrific impact under the right conditions.

The brightness and also the size of a projection depends on the projector’s distance from the projection surface, and the projector’s “lens throw ratio.”

Useful information on projectors including lumens and lens throw ratio can be found on the following website:
www.projectorcentral.com

PROJECTION CONTENT

Content for projection can be provided by a laptop, a camera, a dvd player; or anything else that can be plugged into a projector. Many kinds of software can be used to create content for projection including but not limited to PowerPoint, MSPaint, iMovie, Final Cut Pro, and After Effects. High Contrast imagery is ideal for projection.

We have put together a PDF guide on developing content for projection which you can download here.

<http://interoccupy.org/occupy-bat-signal/>

LEGAL QUESTIONS

Laws vary from state to state, and even city to city, so we can’t tell you what may get you in trouble under what circumstances. We also strongly suggest that you give a local lawyer a call if you have concerns or questions. We are not lawyers.

If you’re legally in an apartment, projecting onto a building, the authorities should need either a warrant or knowledge of a crime in progress to enter the apartment. In New York City, there is a statute that prohibits advertising on someone else’s property, but other than projecting is not illegal.

If you’re on the street with a generator, there may be laws about flammable material, or about using generators, or noise statutes (but you should use a quite generator anyway).

If you’re on a roof without permission you could be charged with trespassing.

If someone asks you to turn off the projector, cooperation is the best way to avoid confiscation of equipment or legal repercussions.

POWER OPTIONS/REQUIREMENTS

A projector can be powered by a plug in power source, a car, a generator, or a big battery. Using a generator is certainly simpler, and just about anyone can figure that out, but considering the noise and exhaust that a generator creates, as well as iffy legal issues regarding public use of generators, we think that battery power is a favorable option.

Different projectors draw different levels of power, so make sure to check that your power source can support the power requirements of your projector. Older projectors tend to draw more power for less lumens.

BATTERY POWER REQUIREMENTS

- Pure sine wave inverter (we used the Power Bright APS600-12 Pure Sine Wave Power for about \$180)
- A deep cycle (“marine”) battery
- voltmeter
- drip-charger

BATTERY CALCULATION

100AH batteries, can power a ~4-600 watt load safely for just under 2 hours. Most deep cycle batteries come with an AH (amp hour) rating. To calculate the appropriate size battery for your setup check out:

<http://www.powerstream.com/Amps-Watts.htm> <http://overlandresource.com/what-is-an-amp-hour-and-how-to-calculate-battery-capacity>

PURE SINE INVERTER

We used 600w pure sine inverters.

You need an inverter that's strong enough to start the projector, but not one that's so big it'll drain the battery just by running. When the inverter is not supplying power, it draws low amperage from the battery and may be left connected to the battery for up to three hours. However, we recommend the inverter always be disconnected when not in use

PROJECTOR HAND CARTS

Projectors can be propped up in various ways. The OWS street projection crew built easily maneuverable, battery powered projection setups using used hand carts. Each handcart was outfitted with a projector shelf made from 3/4" plywood and vertical plank for weighting the projector shelf and mounting the inverter. The battery is ratchet strapped to the base of the cart.

CHECKLIST

- Projector
- Projector Power Source
- Digital media source material
- Cable to connect media player (laptop, smart phone etc) to projector - Rain Gear
- A partner
- Camera for documentation

DO'S AND DON'TS

- DO test everything before going out.
- DO keep the battery charging as much as possible. The drip-chargers aren't capable of over-charging the battery
- DON'T knock or bump a projector while its on (non-LED projectors, which is most) is the easiest way to kill a bulb. The filament inside the projector is very very hot, and fragile. Jarring movement can easily break the filament, be careful.
- DO use the voltmeter test the battery. If the battery drops below 11.2 volts (roughly), its probably time to use the remaining power to cool the projector. Turn it off, let it cool down.
- DO recharge your batteries ASAP once drained.
- DO recycle dead batteries. Lead acid batteries die pretty quickly, especially when not used regularly or left uncharged for long