

DC Spitter Mechanism Setup and Use instructions:

Thank you for the purchase of a DC Spitter Mechanism. The following instructions will walk you step by step instruction on the setup of the spitter and integration of an optional (not included) animation controller.

Requirements:

- Air compressor with 30-120 PSI constant flow.
- ¼" NPT female threaded air compressor fitting (nipple) that matches your current compressor's fitting.
- 110V AC power (possibly up to two outlets if used in conjunction with a haunt controller).

Safety precautions:

- Only persons with electronic wiring knowledge should modify this unit.
- All exposed wires, should be covered in heat shrink tubing and or electrical tape.
- Do not modify or tamper with wires if power supply is or has been recently been plugged in
- Do not submerge or expose valve or power supply into a wet location
- Never fill water reservoir with power supply energized
- Never exceed 120PSI
- Do not mount spitter mechanism directly into areas that could possibly spray water or air into viewer's eyes or ears.
- Use discretion and common sense during use, and keep safety and your #1 priority at all times.

If you have any questions please email DC with as much detail as possible at: info@dcprops.com

Setting up the Spitter:

For the setup of the DC Spitter Mechanism first plan out placement of the spitter, triggering device and the valve and power supply. The power supply, controller and valve should never be used around water or in an area that is potentially exposed to water, and as an additional precautionary measure the valve should not be connected to a vessel or object or area that is electrically conductive (ie the side of a metal barrel containing or not containing water).

Incase of the possibility of contact with water or moisture the valve should also not be allowed to lie on the ground. We strongly suggest mounting the valve to a piece of wood and if possible onto a wall; out of any possible water exposure.

With the valve and power supply configured, you can now run the white 1/4" tubing and the connected 5/32" siphon tube up through your prop and out of the mouth or ejection area. Next run the black 5/32" siphon tube into a water reservoir. We suggest a 1 gallon milk jug or similar container, but DO NOT use any container that held any form of cleaner, detergent, bleach or other similar harmful chemical.

The siphon tube (and main airline) should also be cut as close to the ejection tip as possible to allow for less travel, providing a quick response time (IE, if there is 4' of tubing coiled in front of the reservoir, cut that off).

When used inside a barrel that is filled with water, cut off the tubing about a foot below the water level, while the prop is in its triggered position.

The last portion of the basic setup is to add a 1/4" NPT female threaded air compressor fitting (nipple) to the 1/4" NPT push in fitting on the end of the air supply line. Thread the nipple fitting over the push in fitting, and tighten. We do not provide these with the mechanism due to the wide variety of fittings in circulation. Most common fittings are "IM" and avail in 1/4" NPT and 3/8" NPT in almost all hardware stores, or online at www.mcmaster.com or www.harborfreight.com.

With the air supply line connected to your compressor, and the valve, power supply, and tubing in place, simply plug in the power supply and within a second or two, your spitter will begin spitting a fine mist of water at your victims.

To adjust the flow of water, simply adjust the incoming PSI to the valve. The valve can run down to a minimum PSI of 30 and to a maximum of 120PSI.

Wiring:

Basic setup and integration of a “non-wired” manual trigger - (ie power cord or X-10 system):

By far the simplest way to activate the spitter mechanism is to manually plug in the power supply into a house hold wall receptacle. Adding 110V to the power supply will switch the valves airflow, and begin the ejection of water through the spitter mechanism.

Many people do not want to manually plug in a power supply for each activation, so the next easiest option is to integrate a wireless 120V controller such as the X-10 RC6500 (http://www.x10.com/products/x10_rc6500.htm) hand held light controller. For about \$25 you can wirelessly turn on and off the spitter from up to 40' away. For this setup, please follow X-10's instructions for setup and triggering.

Basic setup and integration of a pressure mat or Push Button Trigger:

First ensure the power supply is off and had not been plugged in for at least 10 minutes; the power supply holds power, and if it is or was recently plugged in, there is a possible shock hazard.

With the power supply un-energized, take the power cord that is running from the power supply to the valve and separate (spilt apart) the two wires about a foot from the power supply. As a precaution, all wiring should be kept as far from the valve and water as possible. Once split you should be left with a solid black wire and a black wire with a white stripe.

The black wire with the white stripe is the constant and you won't touch that one. The solid black wire needs to be cut and the shielding stripped about 3/8 of an inch on each cut end. With both ends stripped, now you can connect the first (common) wire of a push button trigger or step pad's wires to the spitter's power wire, solder the connection. Depending on the pad or button, the “C” terminal or constant should be connected to the side coming in from the power supply, and the “N/O” (normally open) will connect to the wire running to the valve on the spitter, solder this wire onto the pad or buttons terminal and apply heat shrink tubing or electrical tape to all exposed wires (individually).

With those connected, you have created a normally open circuit/switch that closes when someone steps on the mat or when the button is depressed.

Basic setup and integration of a “relayed” animation controller:

These instructions are for wiring a “relayed” controller, such as an Animation Maestro, PETIII, or Terror By Design UDT2 or Puppetmaster. The manufacturer's instructions supersede these instructions, so read and follow those instructions and precautions prior to wiring.

To connect a “common” relayed controller first ensure the power supply is un-energized and take the power cord that is running from the power supply to the valve and separate (spilt apart) the two wires about a foot from the power supply. As a precaution, all wiring should be kept as far from the valve and water as possible.

Once split you should be left with a solid black wire and a black wire with a white stripe. The black wire with the white stripe is the constant and you won't touch that one. The solid black wire needs to be cut and the shielding stripped about 1/4 of an inch on each cut end. With both ends stripped, now you can connect the first (common) wire coming from the power supply into the "C" (constant) terminal. Next connect the wire running to the valve on the spitter into the "N/O" (normally open) terminal.

This will complete the circuit, and the controller will "close" the circuitry loop, per your program.

Basic setup and integration of a "powered" animation controller:

These instructions are for wiring a "powered" controller, such as a Prop 1 micro controller or Sprawling Delusions Keybanger (using a 24V main power supply, with 24V output).

This setup uses the power supply from the controller to power the valve, so in this setup you will want to cut the power supply off about 18" away from the power supply. Keep the power supply for future use, or for powering the controller.

With the power supply removed, separate (spilt apart) the two wires you just cut about 3" and strip approximately 1/4" off each end. As a precaution, all wiring should be kept as far from the valve and water as possible. Once split you should be left with a solid black wire and a black wire with a white stripe.

The black wire with the white stripe is the constant and will need to be connected into the "V+" or "POS" terminal. The solid black wire will need to be connected into one of the "N/O" (normally open) terminals.

This will complete the circuit, and the program you enter into the controller, will control the opening and closing of the circuit (ie start and stop of the spit).

Suggested Animation controllers:

- Animation Maestro: great for triggering 1 item, extremely easy setup and real-time programming. Available from www.dccropshop.com
- Animation Maestro 2: Great for triggering two items with real-time programming (ie spitter and a pneumatic solenoid valve). Available from www.dccropshop.com
- SD Keybanger: Great for triggering up to 6 items with extremely easy setup and real-time programming. Available from www.dccropshop.com
- X-10 Remote control: Extremely easy to use and wireless up to 40'. Available from http://www.x10.com/products/x10_rc6500.htm
- Prop 1 Microcontroller: Great for triggering multiple items (up to 8), requires programming knowledge. Available from www.dccropshop.com