

# Settings

## Normally-Closed Output

Output will stay ON by default and turn OFF when you activate it. To toggle this option, power-up holding the REC button for a few seconds.

## Write Protect

Recording animation will be disabled if this option is enabled. To toggle this option, power-up holding the 1/Play button for a few seconds.

## Factory Reset

Power up holding BOTH buttons for a few seconds to reset to factory defaults.

## Determining Current Settings

At startup the current settings will be shown on the LED. See the table below to find the pattern you see.

Settings - Status LED Pattern at Startup	
<i>It'll start with one of these blink patterns</i>	
	Default (Write-Protect and Normally-Closed Output are disabled)
	Normally-Closed output enabled
	Write-Protect enabled, Normally-Closed Output disabled
	Both Write-Protect and Normally-Closed Output are enabled
<i>Followed by one of these patterns IF any v2 options are enabled</i>	
	Normally-Closed Input enabled
	No Looping enabled (Scene won't loop if trigger stays active)
	Both options above enabled

## Version 2 Only

### Normally-Closed Input

Enable if you want to trigger the scene when the input turns OFF instead of when it turns ON.

### No Looping

Enable this if you do NOT want the unit to repeat the scene if the input is still active when the scene ends.

### Enabling / Disabling Above Options

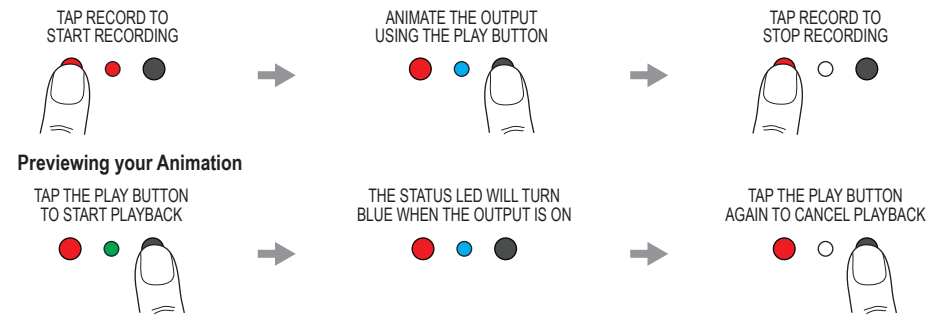
Power up holding the 1/Play button for 10 seconds until the LED turns yellow. Let go of 1/Play, the current state is indicated on the LED as shown in the table below. Tap REC to cycle between states in the table. Tap 1/Play to save and reboot.

Status LED when changing N.C. Input / No Looping Options	
	Neither option enabled
	NC Input Enabled
	No Looping Enabled
	Both Options Enabled

# Recording Animation

## Recording Animation

The PicoBoo ONE can record up to 4 minutes of animation. (v1 is 1 minute)



## Leaving the Output On when Animation Completes (v2 only)

If you want the output to stay on indefinitely after the scene finishes hold 1 as you stop recording. The output will stay on after recording and playback. Tap play to turn the output off or trigger the input to start the animation again.

# Troubleshooting

## Recording won't start

Write protection is enabled. See *Operation* for instructions on disabling the write-protect.

## Trigger won't work and LED blinks yellow

The trigger is being ignored, likely because a PIR was detected at startup or playback was canceled. It will clear within 60s.

## Output stays on

Normally-Closed Output might be enabled.

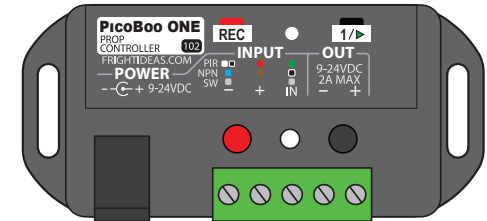
## Unit resets during recording

Your output device is likely drawing too much power, causing your power supply to reset.



# Operating Manual

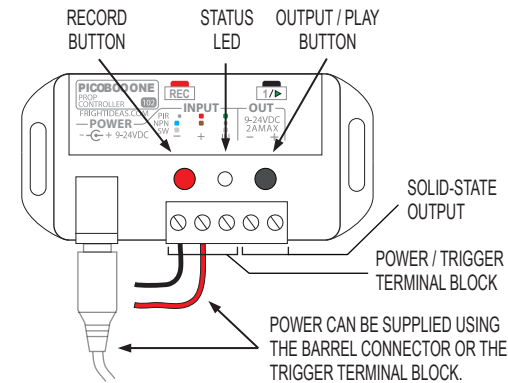
## PicoBoo ONE v2



## NEED HELP?

There are videos and more diagrams available online.

# Getting Familiar



Specifications	
<b>Power:</b>	• 12 to 24VDC at 5-10mA
<b>Input:</b>	• Connect IN to -/GND to trigger
	• Draws 6mA at 12V, 12mA at 24V
<b>Output:</b>	• Voltage Out equals Voltage In
	• Maximum 2A
<b>Animation:</b>	• 4 minutes at 30 FPS

## Sizing your Power Supply

Your PicoBoo ONE's power supply must be 12 or 24 volts DC. The voltage of the device you want to control must match this voltage. The wattage rating of the power supply must be higher than the wattage required by the device connected to the output.

Connections and Controls	
Record Button	Tap this button to start recording animation. Tap it again to stop.
Status LED	This multi-color LED indicates the current status of the PicoBoo ONE. See Operation.
Output / Play Button	During recording, this button is used to activate the output. Otherwise it will start playback.
Power Input 2.1mm	Your 12 or 24 volt DC power supply should plug in here. The connector is a center-positive 2.1mm barrel connector.
Power Input / Trigger Terminal Block	Connect your trigger here. Connecting - to IN will trigger the unit. The - and + pins on this block are connected directly to the - and + on the barrel connector. Feel free to supply or borrow power here if it's more convenient.
Solid-State Output Terminal Block	This terminal block outputs 12 or 24 volts when the output is activated. The voltage output is equal to the voltage used to power the unit.

## Identifying Your PicoBoo ONE Version

Version 1 has square red and green buttons. Version 2 has round red and black buttons and started shipping late 2024. Version 2 has a few more features. See the table to the right for the differences.

**Version 1**  
SQUARE BUTTONS  
   
1 min of Animation

**Version 2**  
ROUND BUTTONS  
   
4 min of Animation  
N.C. Input Option  
No Looping Option  
Blue Output LED

# Operation

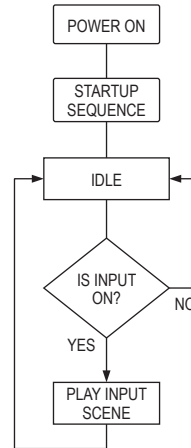
## Startup

At startup the PicoBoo ONE will indicate its current settings on the Status LED (see *Settings* on the last page for details). If a PIR is detected a trigger delay will be activated to allow it to stabilize.

## Operation

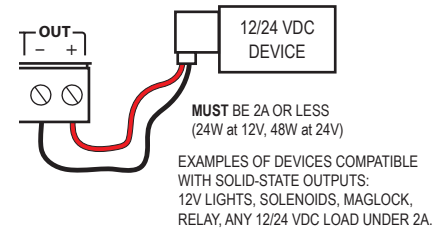
After startup it will enter normal operation and indicate the current operating state on the Status LED. It's a very simple device, it's either recording a scene, playing a scene, or idle. See the table below to identify the state.

Operation - Status LED States	
	Idle and ready to be triggered. LED will flash green every two seconds.
	Playing the scene. LED will be Blue if Output is ON.
	Recording animation. LED will be Blue if Output is ON.
	The trigger input has been tripped.
	Trigger Delay. PIR detected or trigger is being ignored while you record and play a scene.
	Output is ON. (v2 only)

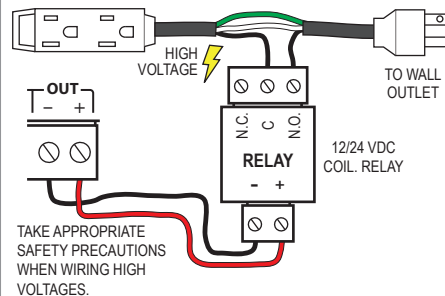


# Output Wiring

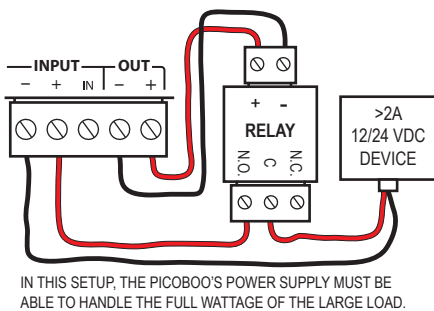
The PicoBoo ONE's output is solid-state, meaning it has no moving parts. Solid-state outputs are very reliable for controlling low-voltage devices. They cannot however be used to directly control high-voltage devices. Whatever voltage is used to power the PicoBoo ONE is switched through the output when it's activated. See below for some common wiring diagrams. The Maximum output current of the outputs is 2 amps.



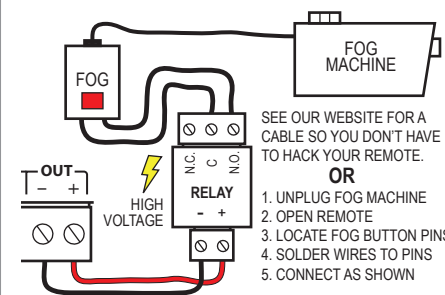
ANY 12 OR 24 VDC DEVICE



ANY 110 VOLT LOAD

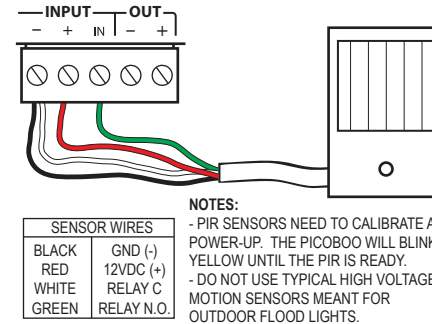


12 OR 24 VDC DEVICE > 2A

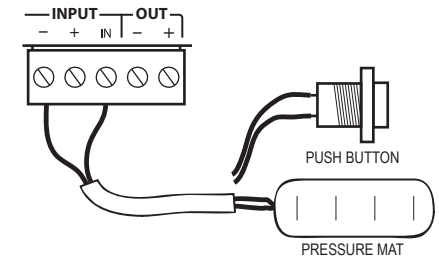


FOG MACHINE

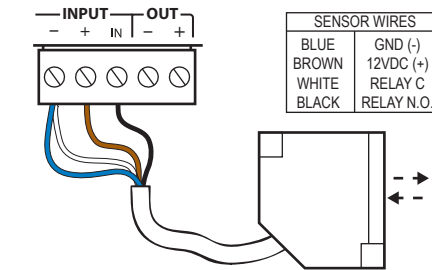
# Trigger Input Wiring



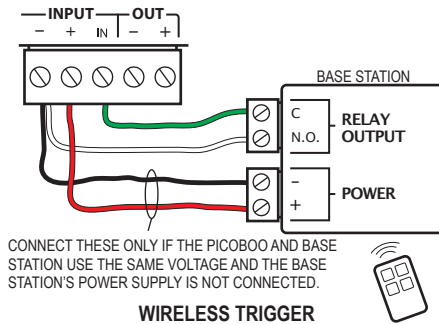
PIR MOTION SENSOR



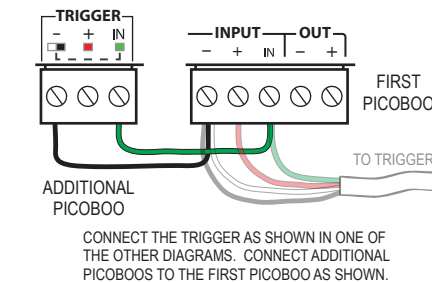
PRESSURE MAT OR PUSH BUTTON



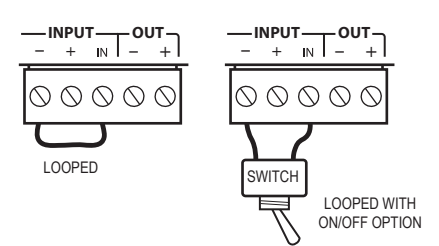
BEAM SENSOR



WIRELESS TRIGGER



MULTIPLE PICOBOOS WITH ONE TRIGGER



CONTINUOUS PLAY (LOOPED)

## Trigger Tips

- Enable *No Looping* mode if your trigger stays on but you only want the PicoBoo to trigger once. You may need this if a magnetic contact is used to detect the closing of a door, or an on/off switch is used instead of a momentary button.
- Enable *Normally-Closed Input* mode if your trigger turns the PicoBoo's input OFF instead of ON. Some beam sensors and motion sensors may do this.
- One setup that could use both of the above options would be one where you want the PicoBoo to play once when a magnetic contact detects an object being removed. Normally a magnetic contact would trigger the PicoBoo when the object is placed, not removed, normally-closed would reverse this. The PicoBoo would still loop when the object is removed, *No Looping* makes sure it only plays once.