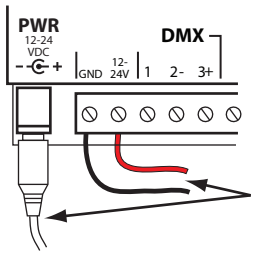
Quick-Start Guide
BooBox Flex

MORE INFORMATION ONLINE

This guide covers only a fraction of what the Flex can do. Tutorial videos and a full manual are available online.

Power Supply



POWER CAN BE SUPPLIED USING THE BARREL CONNECTOR OR THE TRIGGER TERMINAL BLOCK.

Selecting your Power Supply

The Flex requires a 12 or 24 volt DC power supply. We generally recommend using a 24 volt power supply. This will enable you to use larger solenoids without exceeding the maximum current capacity of the solid-state outputs. It will however require that all the devices connected to your outputs be rated for 24 volts.

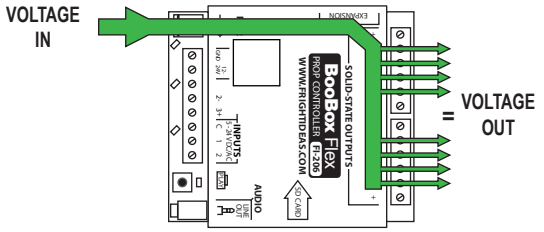
Sizing Your Power Supply

To size a supply you must calculate for the worst-case scenario. Add up the wattage for the most outputs that will be on at any one time, then add 2 watts for the Flex.

Example:

2 watts	Flex (If using ScareMaster use 5 watts)
+ 18 watts	3 x 6 watt solenoids
+ 1 watt	LED Light
= 21 watts	Total - Need at least 21 watts

Solid-State Outputs



About Solid-State Outputs

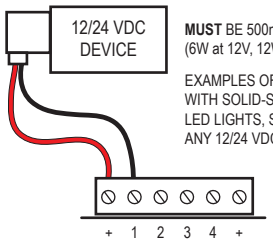
Solid-state outputs are great for reliably controlling relays, solenoids, and LED lights. They cannot be used to directly control high-current, 110 volt, or contact-closure devices like a relay can. However, unlike relays, they have no moving parts that wear out over time. Keeping these moving parts outside of the controller allows them to be easily replaced when they wear out.

Connect directly to the solid-state outputs when appropriate, then use external mechanical or solid-state relays for high current or high voltage loads. This will result in a highly reliable and maintainable system.

Solid-State Driver Chip Failure

If you accidentally short the outputs you may notice some or all of the outputs will be stuck on or off, even after cycling the power. This usually means the solid-state output chip needs to be replaced. We sell replacements on our website for a few dollars.

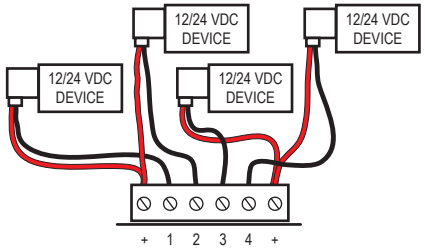
Solid-State Output Wiring Diagrams



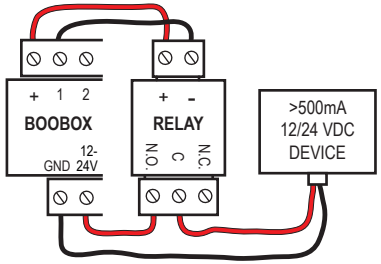
MUST BE 500mA OR LESS (6W at 12V, 12W at 24V)

EXAMPLES OF DEVICES COMPATIBLE WITH SOLID-STATE OUTPUTS: LED LIGHTS, SOLENOIDS, RELAYS. ANY 12/24 VDC LOAD UNDER 500mA.

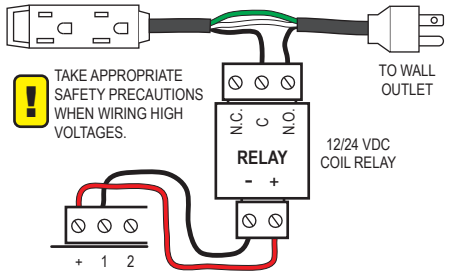
ANY 12 OR 24 VDC DEVICE



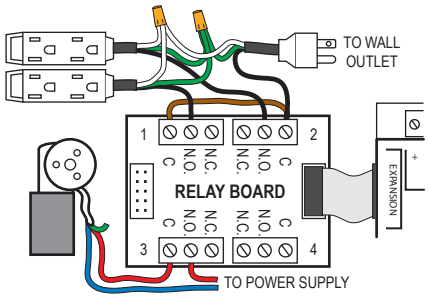
FOUR 12 OR 24 VDC DEVICES



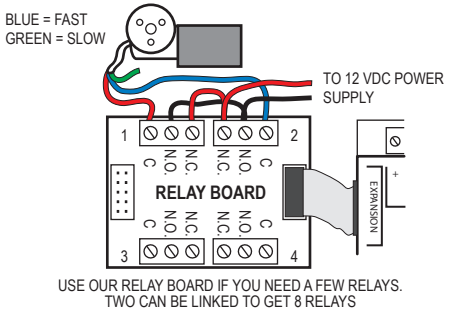
12 OR 24 VDC DEVICE > 500mA



ANY 110 VOLT LOAD

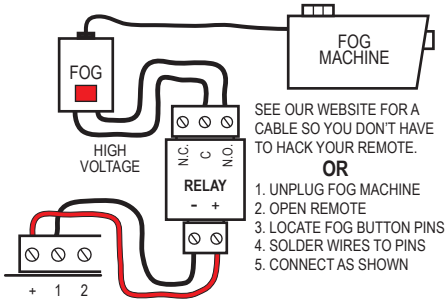


USING A BOOBOX RELAY BOARD



USE OUR RELAY BOARD IF YOU NEED A FEW RELAYS. TWO CAN BE LINKED TO GET 8 RELAYS

12 VDC MOTOR IN FORWARD AND REVERSE

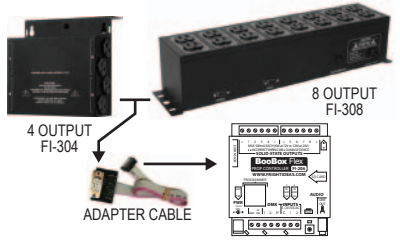


SEE OUR WEBSITE FOR A CABLE SO YOU DON'T HAVE TO HACK YOUR REMOTE.

OR

1. UNPLUG FOG MACHINE
2. OPEN REMOTE
3. LOCATE FOG BUTTON PINS
4. SOLDER WIRES TO PINS
5. CONNECT AS SHOWN

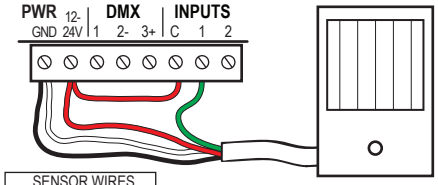
FOG MACHINE



USE ONE OF OUR AC RELAY PACKS WHEN YOU HAVE A LOT OF 110 VOLT DEVICES TO CONTROL.

AC RELAY PACKS

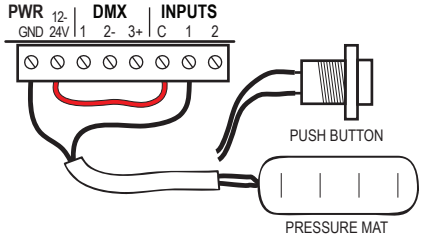
Trigger Input Wiring



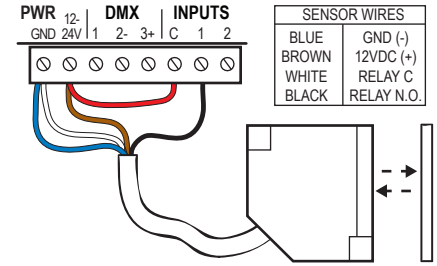
SENSOR WIRES	
BLACK	GND (-)
RED	12VDC (+)
WHITE	RELAY C
GREEN	RELAY N.O.

NOTE: PIR SENSORS CAN TAKE UP TO A MINUTE TO "WARM UP". DURING THIS TIME THE BOOBOX'S INPUT LIGHT WILL BLINK AND THE SENSOR WILL NOT RESPOND.

PIR MOTION SENSOR

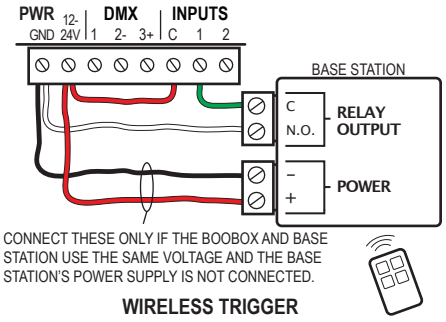


PRESSURE MAT OR PUSH BUTTON



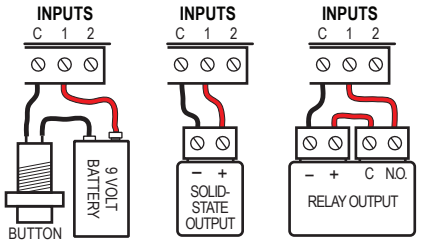
SENSOR WIRES	
BLUE	GND (-)
BROWN	12VDC (+)
WHITE	RELAY C
BLACK	RELAY N.O.

BEAM SENSOR



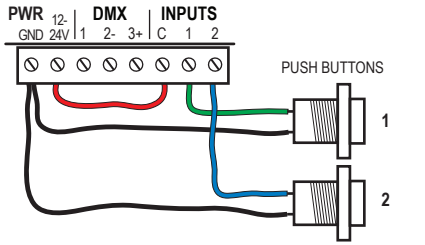
CONNECT THESE ONLY IF THE BOOBOX AND BASE STATION USE THE SAME VOLTAGE AND THE BASE STATION'S POWER SUPPLY IS NOT CONNECTED.

WIRELESS TRIGGER



OPTICALLY-ISOLATE CIRCUITS FROM DIFFERENT POWER SUPPLIES, OR WHEN WIRE LENGTHS ARE EXCESSIVE.

OPTICALLY-ISOLATED INPUT

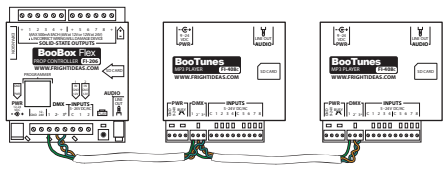


TWO TRIGGERS

DMX

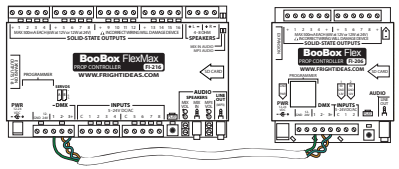
Master Mode (Default)

The Flex can be linked to our BooTunes or BooTunes Amped MP3 players to add more audio channels to your show. The MP3 players will automatically start and stop in sync with the Flex. *The Flex will not output DMX data to control other DMX devices.*



Slave Mode

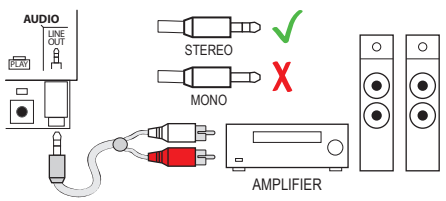
The BooBox Flex can be setup as a DMX slave to a FlexMax or any DMX master. The master can control the Flex's outputs and audio, or trigger scenes depending on the DMX mode.

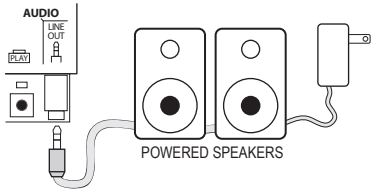


Audio

Connecting Speakers

The Flex audio output is designed to connect to powered speakers or external amplifiers.



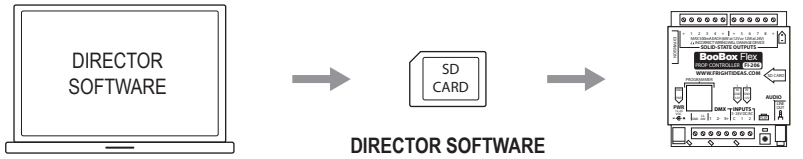


Copying Audio Files to the BooBox

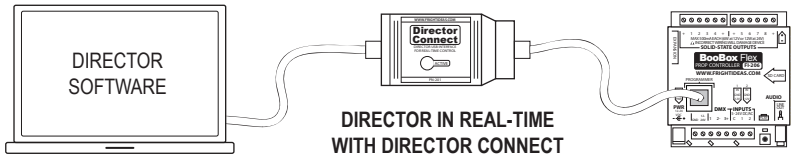
The recommended method to get your audio files onto the BooBox is to use our free Director software. It will copy the sounds to your BooBox or ScareMaster and ensure the filenames and folder structure are correct. If you are using a Mac, or prefer to copy the files on your own, see the full manual for SD card layout details.

Programming

BooBoxes can be easily programmed with our free Director software and an SD card. The Director Connect allows you to see your work in real-time, rather than having to save the program to an SD card first. The ScareMaster is a great real-time programming option for those who don't want to be tethered to a computer.



DIRECTOR SOFTWARE



DIRECTOR IN REAL-TIME WITH DIRECTOR CONNECT

SCAREMASTER IN REAL-TIME

Tips and Tricks

The BooBoxes have some great features that are often left undiscovered. Below are just a few examples:

Ambient Resume - Tells the Ambient scene to resume from where it left off after an input scene has finished.
Play All Sound Mode - Fill a scene folder with audio files and the BooBox will play them all. Great in Ambient mode!
Fade on Interrupt - If a scene is interrupted before completion it will fade out the audio before stopping.
Manual Playback - Hold the PLAY button for a few seconds to select which Input scene you'd like to trigger.