

THE CONTROL FREAK™

Setup Instructions



The Control Freak is designed to automatically trigger your Ghost Bust's video playback when a visitor comes near and either steps on a switch mat or activates a PIR sensor, (each sold separately on our website at www.nightfrights.com).

Setup is simple. Basically, just connect a switch mat to the right-most two holes on the biggest green connection terminal and you're done! But for those using a PIR sensor, or simply wanting a little more information, read on!

Step 1: The DVD Player



Each Control Freak kit comes complete with a Sony DVD player. This specific DVD player responds to the necessary programming code contained within the Control Freak's internal programming.

Unpack the DVD player and set it up within the vicinity of the Ghost Bust's projector. Attach one end of an RCA video cable to the "Video In" jack on the projector; the other to the DVD player. Alternatively, you can use the projector's VGA Input using a VGA to RCA Component cable connected to the red, blue and green component outputs on your DVD player. VGA will display more saturated (richer) colors, though a standard RCA cable is thinner and a little easier to hide. Plug your audio cables into the red and white Audio Out jacks and run the other end into your sound system.

Lastly, plug the DVD player's power cable into an electrical outlet and turn the DVD player on.



Step 2: The Control Freak

Place the Control Freak in a convenient spot somewhere near the Ghost Bust and DVD player. If you look closely, you'll see the front and back panels are labeled "INPUTS" and "OUTPUTS". Inputs will include the power cable connection (labeled "PWR"), connections for Mat Switches and PIR's (labeled "TRIGGERS") and a connection for the Ghost Blast Buster sensor, (labeled "SENSOR"), which we'll discuss later.

Notice that there is a jumper bridging the two center connections on the TRIGGERS terminal block. This jumper must always be in place, unless you are using a PIR Sensor or other NC (Normally Closed) switching device.

Outputs will include connections for the DVD IR Control Cable, (labeled "DVD"), a connection for the Ghost Bust Blaster's solenoid valve, (labeled "BLASTER") and another set of connections for the extra relay (labeled "RELAY") which will allow you to connect other items such as lights or additional pneumatic valves, etc. to an internal 12V relay inside the Control Freak. For more information on using the RELAY, visit our website at www.nightfrights.com/setup/relay.pdf





Step 3: The IR Connection Cable

Connect the included IR Connection cable, which is included with your **Control Freak** purchase. (It's the black cable with the clear LED emerging from one end).

This cable transmits DVD player control signals, just like a standard hand-held remote control would. But instead of you having to point a remote at the DVD player and press Play to manually start the routines, the Control Freak is going to do that for you when it senses a human presence.

Simply connect one end of the cable to the Control Freak in the output jack labeled "DVD".

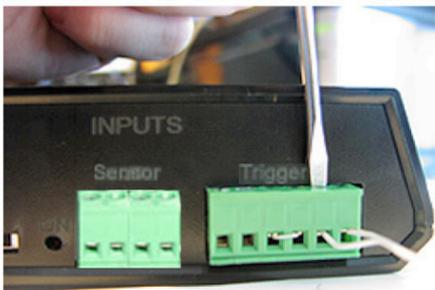
Now, peel the backing off of the sticky adhesive pad on the clear plastic mounting attachment and attach the sensor to the front panel of the DVD player, right above the little mark that looks like the letter R in a square. (Just underneath the Eject button).



Step 4A: Connecting a Switch Mat

To connect a switch mat to the Control Freak, be sure to read any instructions that may have come with your particular unit. That said, it should be fairly simple to connect to the Control Freak. We'll use the **Night Frights Switch Mat** available in our online store as an example of how easy it is to set up...

Simply connect the wire that comes from the switch mat to the far right connectors on the TRIGGERS terminal block, (as seen in the image to the left).



Loosen the screws, Insert the wires into the hole and tighten the screw again.

Reminder: leave the orange jumper wire connected that bridges the two middle two terminals if you're using a switch mat. Only remove it if you're using a PIR Sensor instead.



Turn on the Control Freak's power switch, wait 30 seconds for it to initialize, and you're ready to trigger the Ghost Bust's video!



Step 4B: Connecting a PIR Sensor

To connect a PIR Sensor to the Control Freak, open the PIR by removing the screw that holds the front cover on. There are knock-out points for you to feed the wire through, so punch one of them out or drill a hole through the plastic so that you can feed your wires through.

Once inside, you'll see a blue row of terminal blocks. Notice the labels beneath each hookup ("NC", "12V", and the middle connection is "12V", with tiny + and - symbols to indicate positive and negative connection points).

We won't be needing to hook up the "TAMP" connection, so disregard that pair of terminals.

Tip: Most PIR's don't come with a connecting wire, so I recommend picking up some 24 gauge speaker wire at your local store, or ordering the 4-conductor wire that's perfect for this use from our online store at www.nightfrights.com

You'll need lengths of wire that will span the distance from the PIR Sensor to the Control Freak. Strip off 1/8" of insulation off each end.

The hookups are simple... connect one pair of wires to the terminals labeled "NC" on the PIR, and another pair of wires to the 12V terminals. It's important to remember which wire connects to the + side and which connects to the - side, so if the wire has a white stripe or a raised edge down the length of one side of the cable, connect it to the + terminal. Our cable has color-coded wires to make it easy.



Let's connect the wires to the Control Freak... First, loosen the first four terminal screws on the biggest green terminal block (labeled "TRIGGERS"). Remove the jumper that connects the two center terminals and replace it with the pair of wires coming from the PIR's "NC" connections.

Next, connect the wire coming from the PIR's + terminal to the first terminal on this big green Triggers block. If you connected a wire with a white stripe, or a raised ridge to the + terminal on the PIR, you'll know to connect this same wire to the first connection terminal. This connection feeds the 12V power to the PIR Sensor, so no battery or wall wart is necessary for the PIR!

Then connect the last remaining wire (the one that's coming from the PIR's terminal marked "-") to the second terminal on the TRIGGERS terminal block, which is the ground connection.

Turn on the Control Freak's power switch, wait 30 seconds for it to initialize, and you're ready to test the placement of your PIR Sensor.

Read the PIR's instruction manual for more info, especially if you want to dial in the height/position of your PIR for precise aiming.



- 1: 12V Power
- 2: Ground
- 3: NC (Normally Closed) Input
- 4: Ground
- 5: NO (Normally Open) Input
- 6: +5 Volts

Step 5: Play the DVD

Turn on the Ghost Bust Projector and pop your DVD into the provided Sony DVD player. (The Startle Bites DVD is especially good for use with the Control Freak).



The first thing you'll see, projected onto the Ghost Bust, is a menu listing the playback options. Press the play button on the DVD player to select the first option: "Control Freak Controlled".

Next, you'll see a listing of all the available routines on the DVD, which will either be one or two for most DVD's, or as many as twelve on the Startle Bites DVD. Again, press the Play button to select the first option.

Once you select a routine, the video will begin playing. When that routine ends, the video will go into standby mode, displaying the greek statue appearance resembling a static prop. The Control Freak will keep the video "parked" in neutral until it senses a fresh victim nearby, (someone steps on an attached switch mat or trips an attached PIR sensor). At which point, voila! The routine suddenly begins to play.

Adjust the location of the switch mat so that the timing between triggering the mat and video playback suits your tastes, and you're ready to frighten the kiddies!



TROUBLE SHOOTING

If you're having trouble with the Control Freak here are the most common steps to get you up and running again. If all else fails, you can always contact us here at Night Frights, we'll be happy to help.

"What's that strange clicking?"

If you hear the Control Freak click at regular intervals, it's just the pneumatic blaster circuit getting switched on, going off at whatever interval you have set currently on the Delay ("DLY") adjustment. This Delay setting is an adjustable lockout period to avoid people from re-triggering the Control Freak at will, and is adjustable from a minimum of 15 seconds to a maximum of 3 minutes.

If you don't have a Ghost Bust Blaster connected, simply turn down the Level ("LVL") adjustment all the way counter-clockwise and you should hear the clicking no longer.

"The switch mat works sporadically!"

As mentioned above, the Delay ("DLY") control sets how frequently the switch mat can be triggered. For testing purposes, be sure to turn the Delay setting all the way down (counter-clockwise) so that the switch mat is only prevented from triggering the Control Freak for a short fifteen second period after the last time it fired.





Be sure to select "Control Freak Controlled"

"The DVD routine doesn't pause!"

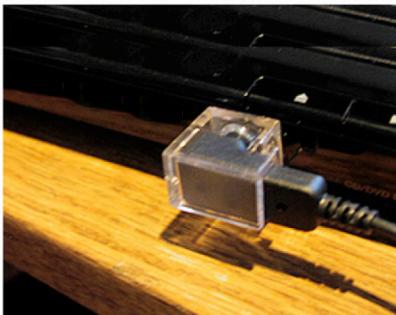
When using the Control Freak the DVD player should pause after the end of the routine and show the Greek Statue face (standby mode), until the next victim triggers the switch mat or PIR again. If the DVD player doesn't pause when it should, but instead moves right on to the next performance, the first thing to check would be the **DVD Pause Menu**. Are you using the "Control Freak Controlled" set of routines on the DVD? (The first set listed on the first menu). Only this set will respond correctly to a switch mat. The others are simply looping all the time with preset pause lengths.

Next, double-check the wire jumper that connects the two center terminals on the biggest green block on the Control Freak. There should definitely be a jumper there, and it needs to be plugged into the TOP half of the connection holes for proper connection. If one or both legs of the jumper are in the bottom half of the connector, the unit will act improperly, playing when it should be pausing. Loosen the two center screws and remove the jumper. Put it back in, making sure that the legs go in the upper holes. Tighten the screws. Give the jumper a tug on both sides to make sure it's connected well, and re-test.

"The DVD routine doesn't doesn't play!"

If the switch mat or PIR isn't triggering the Control Freak, first, make sure the wires are connected securely on both ends.

Next, check the **Infra-Red (IR) LED**. The DVD player is controlled by the clear IR LED attached to black wire that mounts on the front of the DVD player with some sticky tape. Make sure the clear LED is facing the DVD player and pointing at the IR receiver, (which is hard to see, but it's right above the little mark that looks like the letter "R" in a tiny square -- just beneath the EJECT button on the DVD player). Make sure the other end of that cable is plugged into the jack on the Control Freak labeled "DVD".



Infra-Red LED

"How do I prevent the screensaver from appearing or the DVD Player from turning off after inactivity?"

The DVD player's factory default setting makes either the screensaver kick on or has the unit power down after fifteen minutes of inactivity, so if you anticipate long gaps between performances, you may want to turn those settings off. (Note: Some models will have one or the other, some both).

To do so, follow these steps:

First, stop the DVD from playing by hitting the STOP button on the DVD player's remote, then hit the DISPLAY button (about half way up the right side of the remote).

The Control Menu will appear on the left side of the screen (if you have the DVD player connected to the projector and the projector aligned with the bust, you may want to hold up a piece of paper to be able to see the left side of the projected screen).

Use the remote's down arrow key to scroll down to the bottom of this list of options (select the red toolbox icon), then press ENTER.

Use the down arrow key to select "CUSTOM", then hit ENTER again.

Scroll down to select the SCREEN SETUP menu, then press the Right Arrow button to move over to the list of options in the Screen Setup Menu.

Press the Down Arrow button once to select the SCREEN SAVER option and press ENTER,

Scroll down to the OFF selection, and hit ENTER once again to save it.

Do the same process to disable the Auto Power Off feature (if available).

Press the DISPLAY button to exit, and you're good to go!

Now let's **check the connections**.

For the present, disconnect any wires from the Control Freak except the wire for the switch mat, the power cable, and the Infra-Red LED cable (that attaches to the DVD player).

Next, make sure you're connecting it to the **right terminal block**. You should be connecting the switch mat's wire to the largest terminal block on the Control Freak, (the one with six screws). Connect the wire to the two farthest right screws by first loosening the two screws on the top of the green block (turning them counterclockwise), then sticking the ends of the wire into the holes on the front of the green block. Make sure to stick the wire ends into the *upper* part of the hole. Then turn the screws clockwise until tight. Give each side of the wire a small tug to make sure they're clamped down tight.

If you stick the wires into the lower part of the hole, they won't get clamped down correctly, so make sure they go in the top part. When you tighten the screw, the little metal clamp inside the hole should rise up to secure the wire.

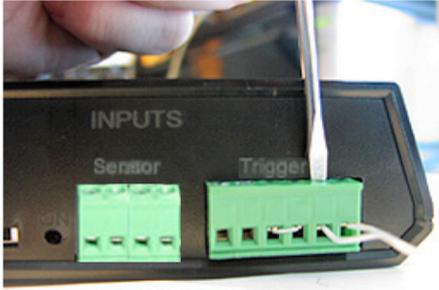
While we're here, make sure there's a **jumper wire** bridging the two middle holes (see the picture at left) and that it's connected securely.

Finally, the last piece of the puzzle to check is the **switch mat**, so let's make sure your switch mat is working.

Disconnect the switch mat. We'll make a super-simple switch to take its place for the moment...

Take a short length of wire (doesn't matter how long, say 6"), and strip 1/4" of insulation off of both ends. Connect the two ends of one side of the wire to the same place on your Control Freak where you had the switch mat (the right-most terminals on the biggest green terminal block). Now, after having waited the obligatory 15 seconds between attempts, touch the two loose ends of the wire together, completing the circuit and simulating someone stepping on the mat. If it works fine now but didn't before, your switch mat needs replacing.

If you need more help, feel free to contact us at: info@nightfrights.com Happy Haunting!



Double-check the switch mat connection



Check the switch mat

Trigger Terminal Input Options



Control input for the DVD IR signal is provided through the six-position terminal block labeled "TRIGGERS"

The designations for the terminals on this terminal block are, (from left to right):

1. +12v; (input power); this can be used to power a commercial PIR sensor, such as the ones available on our website
2. GND; (ground) required for powering an external sensor
3. N/C; (normally closed) input
4. GND; for use with normally-closed, dry-contact devices
5. N/O; (normally open) input; DO NOT exceed 5vdc into this terminal
6. +5v; for use with normally-open, dry-contact devices

The circuit allows for the detection of a normally-closed input going open or a normally-open input going closed; these inputs are not mutually-exclusive and may be used at the same time.

For normally-closed devices (e.g., commercial PIR) terminals 3 and 4 are used; for normally-open devices (e.g., mat switch) terminals 5 and 6 are used.

Note: If the N.C. input is not going to be used it must be shunted to ground with a wire. Failure to shunt the N.C. input will result in cycling of the DVD IR output (at the rate set by the Delay control setting labeled "DLY").