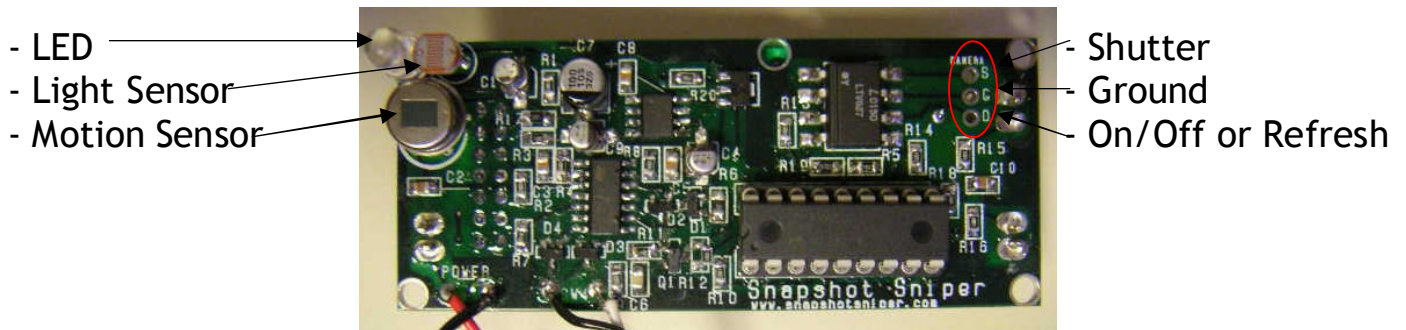
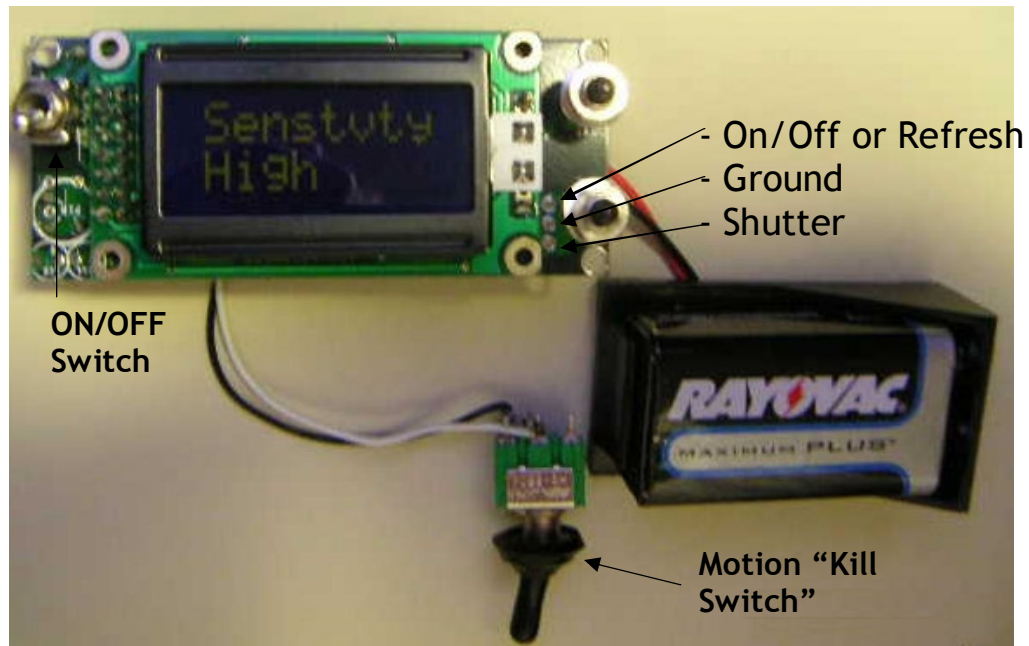


Snapshot Sniper Game Camera Controller Operation



The Snapshot Sniper game camera controller board is the easiest to use, most versatile board available. Below are some of the main features:

- With the LCD user interface, you simply read what settings you want rather than counting flashes from an LED or having to study a diagram to set up dip switches.
- Changes can be made to the settings without the need to power the board on and off.
- In the “Advanced Setup” mode, you select the type of camera, refresh time and shutter time, which allows you to use this board with most any camera that can be controlled with 3 wires. This is all preprogrammed into one chip, so no matter what camera you use, the controller is ready for it without the need for replacing the chip.

Motion Sensor Setup:

Power Up

When you power the unit on, in 4-5 seconds you will see “Warm Up 45 Secs” on the LCD. As the unit is warming up, your current settings will be displayed. If everything is set as you like, then you are done and the unit is ready to start taking pictures when the motion “kill switch” is turned on.

Motion “Kill Switch”:

This is the toggle switch on the outside of the case. When in the up position, the unit will not detect motion. This allows you to open and close the lid and change settings as you desire without activating the unit. Place the switch in the down position to turn motion activation on. This is where you need the switch set for normal operation and test mode.

User Interface:

Before entering Setup, make sure that the “Motion Kill” switch is off. To enter setup, press and hold the “Mode” Button until you see text on the LCD. The top line of the LCD is the feature you are changing, and the bottom line is the setting that you want the feature set to. To change the top line from one feature to the next, press the “Mode” button, to change the feature to a different setting, press the “Set” button. To exit setup, press the mode button until you see “Set To SaveExit”. Press “Set” here and your settings will be saved, and you will exit the setup mode and be back in normal operating mode, ready to take pictures. Don’t forget to turn the “Motion Kill” switch back on.

Features:

Delay Feature

This feature determines the amount of time that has to pass before the unit will take a picture after a picture has already been taken. For example: If the time is set to 5 minutes and an animal triggers the unit, even though the animal may still be moving in front of the unit, it will not trigger again for 5 minutes. This setting is especially useful on a feeder setup, so that one animal won’t fill up the entire memory card. We recommend setting this on 10

seconds for trails and at least 5 minutes on a feeder. It seems that some deer may be annoyed by being flashed repeatedly, and will leave the feeder sooner on a short delay. A longer delay on a feeder may actually get you more pictures.

There are five delay times as follows:

- 10 second
- 1 minute
- 5 minutes
- 15 minutes
- 30 minutes

Double Picture/Movie Feature

When Double picture mode is on, after motion is detected and a picture is taken, the unit will take another picture approximately 10 seconds later regardless of whether there is still motion or not. Once this 2nd picture has been taken then the unit starts the delay between pictures again based on the Delay setting. This setting can be useful to see what effect the flash had on the animal and also to get two different views of the same animal. You can also use this setting to **capture daytime movies**. Just turn double picture mode on and then set the camera to movie mode and it's ready to capture movies!

Sensitivity Feature

This feature controls the distance at which the unit can be activated. The options are:

- High
- Medium
- Low

It is recommended to start with a medium setting and see if you get the distance that you need by using the "WalkTest" feature (described later). In certain conditions such as warm/hot temperatures and areas of heavy vegetation, it may be necessary to set the sensitivity feature to low if you are getting many "false" triggers.

Day/Night Feature

This feature has three options:

- 24 Hour (Unit is always active)
- Day Only (Unit will be active only in the day time).
- Dark Only (Unit will be active only in the night time).

Walk Test Feature

With walk test on (and the motion kill switch on); every time the unit senses motion, the LED will blink. Note: It will take a second or two for the sensor to reset after sensing motion before it can be triggered again. **If the unit doesn't detect motion for 1 minute, walk test will automatically turn off** and the unit will be ready to take pics. By doing this, you can turn walk test on, mount

your setup and lock it up. Then after you are through with the walk-test, you can just leave and let it turn its self off. You should use this feature each time you set your system up, to ensure it will detect motion where you need it to.

Advanced Setup:

Camera Types:

There are two basic types of cameras. One type of camera is turned on by pressing and releasing the on/off button. We are going to call this type of camera **ON/OFF-1**. The other type of camera is turned on by turning the on/off switch on, and leaving it on until you are ready to turn the camera off. We are going to call this type of camera **ON/OFF-2**. The different ways they can be used are ON/OFF mode and Always On mode.

In ON/OFF mode, when motion is detected, the camera comes on, takes a picture and shuts off. In the Always On mode, when you set the unit up, you turn the camera on and it stays on the entire time. When motion is detected, the camera is already on, it snaps a picture and stays on; ready for the next time motion is sensed. Both of these modes have their advantages and disadvantages. Always On mode will allow the camera to take a picture faster, since the camera is ready and waiting. The disadvantage is that battery life will be very poor with most cameras. Of course it is just the opposite for the ON/OFF setup. The camera will take longer to take the picture, because it has to power up first, but battery life is greatly increased.

Camera Setup

Because of these different camera types and setups, you will need to choose three items:

- **CamType**

The "CamType" will be as mentioned above:

- "ON/OFF-1"
- "ON/OFF-2"
- "AlwaysOn"

- **Shutter**

This setting tells the unit how long to wait to push the shutter button after motion is detected. This is only needed for the ON/OFF setups. The always on setups can trigger the shutter instantly since they are already powered up. Different cameras take different amounts of time to power up, so this will be set according to the camera you are using.

- **Refresh**

As a camera sits with no activity, the charge stored for the flash slowly drains away. When the camera needs to take another picture, the flash will first have to charge and then the camera can take the picture. Also, most digital cameras will shut off or go into a sleep mode after a certain time period, which would obviously present a problem when using the "Always On" mode of

operation. Your Snapshot Sniper controller board solves this problem by keeping the camera “refreshed”. The “Refresh” setting sets a time interval for the controller to send a signal to the camera at the time interval that you choose to keep the cameras flashed fully charged. This applies to ON/OFF mode as well as always on mode.

For camera setup, we have listed the most common cameras and a recommendation of initial setup. You can of course experiment with different timings to find what works best for you. For example, we show a 1 hour refresh for most of the cameras. To see if that’s what you want, let the camera sit for 50 minutes and see how long it takes to take a picture. If it’s fast enough, try a 2 hour setting and so on. The longer refresh will help conserve camera batteries, but it will also take a little longer to take a picture since the flash capacitor has drained more that it would with a shorter refresh.

ON/OFF-1 cameras	Shutter	Refresh
- Minolta X20	2 Sec	1 Hour
- Sony DSC-P32	1.5 Sec	1 Hour
- Sony DSC-P41	1 Sec	1 Hour
- Sony DSC-P52	2 Sec	1 Hour
ON/OFF-2 cameras		
- Olympus D370	3 Sec	1 Hour
- Olympus D380	3 Sec	1 Hour
- Olympus D390	3 Sec	1 Hour
- Olympus D395	3 Sec	1 Hour
(Any cameras that use the “Clam-Shelf” design.)		
Always On Cameras		
- Olympus D370 - Olympus D380	None	2.5 Min For pics in about 1 second 2.5 Hours For pics in about 3 seconds and twice the battery life of the 2.5 Min Refresh.
- Canon SureShot Owl PF	None	7 Min