

Snapshot Sniper Game Camera Controller Board

Main Features:

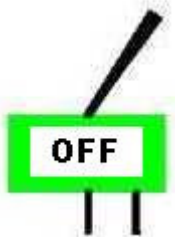
- With the LCD user interface, you simply read what settings you want.
- Changes can be made to the settings without the need to power the board on and off.
- In the “Advanced Setup” mode, **you** select the type of camera, refresh time and shutter time, which allows you to use this board with most **any** camera that can be controlled with 3 wires (some additional parts are required for some 4 wire cameras). 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.

Power Up

When you power the unit on, you will see “Refresh Camera” on the LCD. At that time, the camera will power on for a few seconds to make sure that the flash is charged. Once the camera is refreshed, then the LCD will display “Ready” for a few seconds and then the LCD will power off. If everything is set as you like, then you are done and the unit is ready to start taking pictures or ready for walk test (depending on whether you have it set to start in walk test mode) when the motion “kill switch” is turned on.

Motion “Kill Switch”:

In the OFF position, this switch allows you to open and close the lid and change settings as you desire without activating the unit.



Place the switch in the ON 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 10 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 10 minutes. You will find that the Snapshot Sniper system has a separate delay for day and night. This is very useful for a few reasons. One is that you for maximum speed, you can set it to 5 seconds in the daytime and then set it longer for night time to allow for the camera flash to charge. The delay settings are especially useful on a feeder setup, so that one animal won’t use up all of your memory card. If you have a problem with birds taking up multiple pictures during the day, now you can set the delay time longer and still keep it short at night, or you have a coon problem at night, then you can set the night delay longer, it’s up to you. There are now more short delays, so if you have a camera that can take night pictures every 5 seconds, then you can use that, or if the camera needs 20 seconds for the flash to recharge, then you can set it to work that way.

The delay times as follows:

- 5S, 10S, 15S, 20S, 1M, 2M, 5M and 10M delays

Pictures Per Event Mode

With this mode, you can select 1 to 5 pictures per event. After motion is detected and a picture is taken, the unit will continue taking up to 5 pictures (depending on what you have it set on) approximately 5 seconds apart in the daytime and approximately 12 seconds apart at night; regardless of whether there is still motion or not. Once the last picture has been taken then the unit starts the delay between pictures again based on the Delay setting. This setting can be useful to get different views of the same animal.

Activity mode

Activity mode will allow the sensor to trigger the camera about every 4 seconds. In the day time, most cams should take the pic every time, at night, it will just depend on the cam. If you have a very expensive Nikon D60 etc. then you can probably get 4 second night shots, with a P41 maybe 8 seconds, and an S40 probably about 12 seconds. They may be faster depending on the amount of light outside and how close the animal is. In this mode, the camera shuts off after 20 seconds of no motion, or after approximately 1 minute, even if there is still motion so that one animal can't keep it going indefinitely,

Sensitivity Feature

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

- Extra High
- 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 areas of heavy vegetation, it may be necessary to set the sensitivity feature to a lower setting 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 it and let it turn it of itself. You should use this feature each time you set your system up, to ensure it will detect motion where you need it to.

Advanced Features Setup:

You only need to enter this setup menu when you are 1st setting the board up for use with a certain camera. 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 how we recommend they be setup. You can of course experiment with different timings to find what works best for you.

Recommended Advanced Settings

| ON/OFF-1 cameras | Shutter | Refresh | Suggested Minimum Night Delay |
|-------------------------|----------------|----------------|--------------------------------------|
| Minolta X20 | 2 Sec | 1 Hour | 10S |
| Sony DSC-P32/52 | 1.5/2 Sec | 1 Hour | 10S |
| Sony DSC-P41 | 1/1.5 Sec | 2 Hour | 10S |
| Sony DSC-P100/150/200 | 1.5 Sec | 1 Hour | 10S |
| Sony DSC-S40/S600 | 2 Sec | 1 Hour | 15S |
| Sony DSC-W1/5/7 | 1.2 Sec | 1 Hour | 10S |
| Sony DSC-W35/55 | 1.2 Sec | 2.5 Hour | 10S |
| Canon SD630 | 1.2 Sec | 2.5 Hour | 10S |
| Nikon L10/11 | 1.2 Sec | 2.5 Hour | 10S |

ON/OFF-2 cameras

| | | | |
|--------------------------|-------|--------|-----|
| Olympus D370/380/390/395 | 3 Sec | 1 Hour | 10S |
|--------------------------|-------|--------|-----|

(Any cameras that use the "Clam-Shell" design.)

Always On Cameras

| | | | |
|-------------------------|------|--|-----|
| - Olympus D370 | | 2.5 Min For pics in about 1 second | |
| - Olympus D380 | None | 2.5 Hours For pics in about 3 seconds and twice the battery life of the 2.5 Min Refresh. | 10S |
| - Canon SureShot Owl PF | None | 7 Min | 10S |

Start Walk

With this setting on, the board will automatically start in walk test mode each time you turn it on. With this option off, it will start in camera mode.