HyperFire™, *RapidFire*™ & Silent Image™
Professional Series Cameras

Professional Camera Configuration User Guide

Table of Contents

Copyright: May 2011

Changing Your Camera Settings

Your Reconyx (HyperFire™, RapidFire™, and Silent Image) camera's settings can be adjusted from your personal computer using the "RECONYX Professional Camera Configuration" software. All of the camera settings are stored on your memory card and are transferred to your camera when you insert the card in the camera and turn the camera on.

Once your settings are transferred they are retained by the camera – even when the camera is off. Therefore you don't need to use the configuration software again unless you want to change the settings. Your settings are also retained on your computer for future use, so that the next time you select run the configuration software to adjust your settings, you see the settings you most recently selected rather than the factory defaults.

Note:

- When using a Silent Image camera, your memory card must be formatted FAT (*not* FAT32).
- HyperFire™ & RapidFire™ cameras work with cards formatted either FAT or FAT32.
- If you are uncertain of the formatting of your card, use "MapView" to erase the card (see **MapView User Guide: Erase Memory Card**); erasing the card will also properly format it for use with your camera.

To change your camera settings, insert your memory card into the card reader of your computer, move your mouse cursor over the "RECONYX Professional Camera Configuration" icon on your desktop and double-click your left mouse button. Or, from the Microsoft Windows **Start** menu, select
Programs > RECONYX > Configure Professional Camera.

The configuration software opens displaying four tabs.
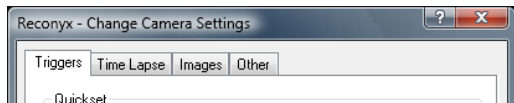
- To save the changes you've made to your camera's settings and close "Change Camera Settings," click **OK** on any tab. The new settings will be stored on your memory card; you must insert the memory card in the camera and turn the camera on to load the settings to your camera.

- To set the camera's date and time without closing "Change Camera Settings," click **Change Date/Time…**. "Set Date & Time" opens. See **Set Date & Time** for detailed instructions.

- To restore the original factory settings click **Use Factory**. You will be prompted to confirm that you want to erase any changes you've made.

Select the tab that for the camera settings you want to change:

Triggers – Use this tab to set how you want your camera to respond to trigger events by; specifying how many pictures to take and the interval between pictures, the quiet period (no response to triggers), and whether or not to use the internal motion and/or an external trigger. You also restrict triggers by time of day using the Schedule window, or automatically have your trigger settings set for you by selecting one of the quickset options.

Time Lapse – Within this tab you select whether you want to take time lapse pictures, set the time interval between pictures, and set up a schedule specifying the time lapse on and off periods.

Images – You may enter a label, select the temperature scale, and select a 12 or 24 hour timestamp for data that will be stored in the Image Data bands on each picture your camera takes. Use the Images tab to adjust brightness, contrast, and sharpness, and saturation.

- With HyperFire™ & RapidFire™ models you can change the settings for high or low resolution as well as night time shutter speed and night time ISO sensitivity.

- With Silent Image™ VGA models you can choose to include a border for 4x6 prints.

CodeLoc – Set a four-button CodeLoc™ password sequence and specify whether or not it is required to activate your camera.

Help – The Help file can be opened at any time by pressing "F1" on your keyboard, or clicking the question mark ![?] in the upper right corner of the page.

Set Date & Time

TIP: It is easier to change the date and time directly on your HyperFire™ or RapidFire™ Professional series cameras than it is to do it using this program. This avoids you having to "guess" the exact time at which you will power the camera on.

With Silent Image™ cameras you must use this program to set the time, as there is no option to set the time on the camera.

You should only need to set the camera's date and time the first time you use the camera, or when you're switching to and from Daylight Savings Time. The internal battery and memory will retain all settings when the camera is powered off, or changing batteries.

After you select **Set Date & Time** from any tab in "Change Camera Settings," you will be asked to confirm that you want to set the date and time since setting the date and time is only necessary if the camera's settings are incorrect.
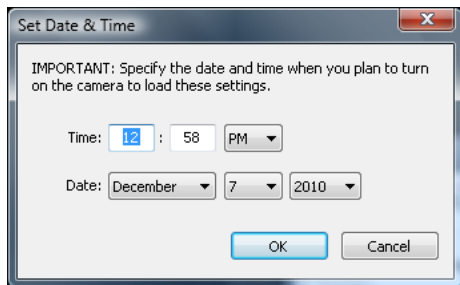
- Enter the **Time** (hours and minutes) and select **AM** or **PM**.
- Select the **Date** (month, day, and year).

TIP: The hours and minutes you enter should be slightly ahead of the actual time, because your camera will not update to the time you set until you insert the memory card into the camera and turn the camera on.

*TIP: The hourly display that's recorded in your Image Data can be set to 12 or 24 hours on the **Images** tab of "Change Camera Settings."*

Triggers Tab

Your RECONYX™ professional series camera can be set to take pictures as a result of triggered events (motion detected), either via the internal motion sensor or an optional external sensor.

After your RECONYX™ camera is activated by a trigger, it takes a NearVideo™ *sequence of images*. You specify the number of pictures you want to take in a NearVideo™ sequence, and how quickly you want the pictures to be taken. Your RECONYX™ camera is capable of taking pictures at the rates from 1 to 3 frames per second depending upon camera model and speed of card.

The NearVideo™ feature allows you to see more than just the animal that triggered the camera; NearVideo™ sequences lets you see what the animal was doing and determine how long it was in the camera's field of view. Although your RECONYX™ camera can be set to take only one image per trigger, it is generally advantageous to take *three or more* pictures per trigger to be sure that you can clearly see the features of the animal from multiple angles as it moves within the camera's field of view.
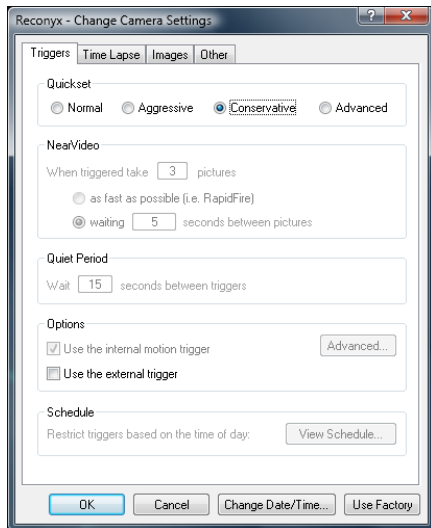
Quickset

The Quickset selections make it easy for you by automatically configures all of the trigger options (Number of Pictures, Time between pictures, Quiet Period between triggers) for you based on the level you select.

- **Normal**
  - ✓ 3 pictures per trigger
  - ✓ 1 second interval between pictures
  - ✓ 0 second quiet period between triggers
- **Aggressive**
  - ✓ 5 pictures per trigger
  - ✓ RapidFire™ (takes pictures as fast as memory card can save them)
  - ✓ 0 second quiet period between triggers
- **Conservative**
  - ✓ 3 pictures per trigger
  - ✓ 5 second interval between pictures
  - ✓ 15 second quiet period between triggers
- **Advanced**
  - ✓ Overrides all settings and allows you to set any configuration you want

NearVideo

These options are available when you select "Advanced" in the Quickset selections.

- Enter the number of pictures taken after a trigger from 1 to 99.
- Set the time the camera waits after taking one picture before taking another in the NearVideo™ sequence.
  Select either…
  - ✓ as fast as possible (i.e. RapidFire)
  - ✓ wait [nn] seconds between pictures (you must enter the number of seconds from 1 to 60)

*Note***:** The more pictures you take after a trigger *and* the less time you wait between pictures, the better the quality of your NearVideo™ sequence. However, this increases the power used by your camera and increases your memory card storage requirements.

Tip: The default (and minimum recommended) number of pictures to take in a NearVideo™ sequence is three.

*Note***:** The default time that the camera waits between pictures is one second, but you can adjust the time that the camera waits between pictures. If you select the option to take RapidFire™ pictures, the camera will take pictures as fast as it can save them to your memory card (this speed will vary depending upon camera model, settings, and the type of memory card you are using.

Quiet Period

Set the number of seconds to wait between triggers from 0 to 3600. Your camera will not respond to any trigger event during this time.

Options

- Select **"*Use the internal motion trigger*"** if you want to enable the internal PIR (Passive Infra Red) motion sensor.

    *Note***:** To change the PIR sensitivity settings on your RECONYX camera, click on the **Advanced…** button in the options section. You can choose from five levels of sensitivity. However, we recommend leaving the sensitivity at High in nearly all situations.

- Select **"*Use the external trigger*"** if you want enable an external trigger

    *Note***:** An external trigger jack is an add-on option you may purchase; for more information go to **www.reconyx.com**.

Regardless of the type of sensor you select, your RECONYX camera uses InstaOn™ technology to "wake-up" within a fraction of a second triggering.

Schedule (Trigger)

To restrict triggers based on the time of day, click the **View Schedule** button.

*Note***:** The default trigger schedule is for the camera to be active 24 hours a day, taking pictures according to your trigger settings, but you can use the trigger "Schedule" to set times when the trigger feature of your camera is turned off.
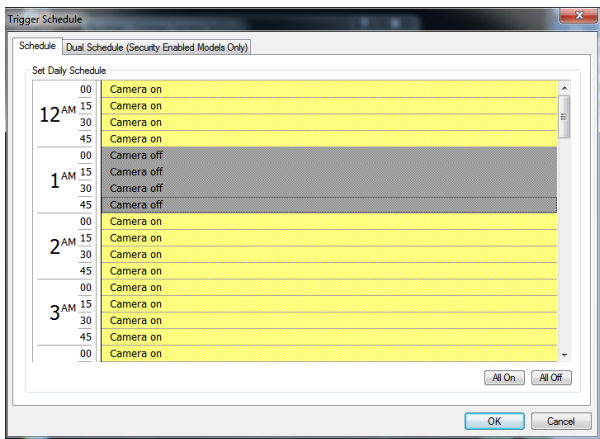

There are two "Schedules" that can be defined; one for **Triggers** and one for **Time Lapse**. The triggers schedule specifies times when the *trigger feature* of your camera is turned on or off. Likewise the Time Lapse schedule specifies times when the *time lapse functionality* of your camera is turned on or off (see **Time Lapse**).

- Click the fifteen-minute blocks to change the setting from **Camera on** to **Camera off**, or vice versa.

- To select larger blocks of time, click and hold your left mouse button in the fifteen-minute block you want to start with. While holding the mouse button, drag your cursor down until the block of time you want is highlighted, and then release the mouse button to change the setting from **Camera on** to **Camera off**, or vice versa.

- Click **All On or All Off** to quickly change the setting for all time blocks.

©RECONYX, Inc.

Time Lapse Tab

Your camera can be set to take time-lapse sequences of images.
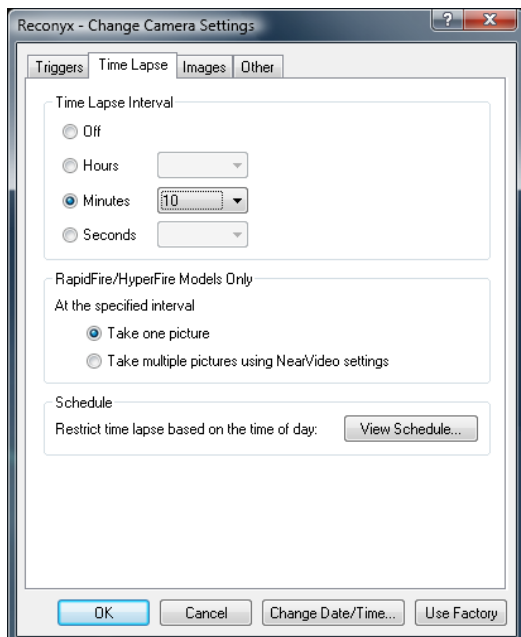
Time Lapse Interval

To use Time Lapse photography select; **Hours**, **Minutes**, or **Seconds.** Then select the time the camera waits after taking one time lapse picture before taking another.

Number of Pictures – RapidFire/HyperFire Models Only

The Time Lapse feature may be used to take just one picture every interval, or up to 99 pictures.

To take more than one picture, the time lapse interval must be at least 5 minutes.

After the interval is set, select **Take multiple pictures using NearVideo settings** and then go to the **Triggers** tab.

Set the NearVideo settings and Quiet Period to be what you want when a Time Lapse event occurs.

> *Note*: The Time Lapse settings are shared with the Motion and External triggers. Unlike taking a single time lapse image, if a Motion or External trigger event is happening when the Time Lapse timer goes off, the Time Lapse is ignored. That is why it is recommended that Motion and External triggers are turned off when scheduling multiple time lapse images through the RapidFire menu.

Schedule (Time Lapse)

To restrict time lapse based on the time of day, click the **View Schedule** button.

The "Schedule" window opens. You set the schedule just like you did for **Triggers.**

> *Note*: The default time lapse schedule is for the camera to be active 24 hours a day, taking pictures according to your time lapse interval, but you can use the time lapse "Schedule" to set times when the time lapse feature of your camera is turned off.

©RECONYX, Inc.
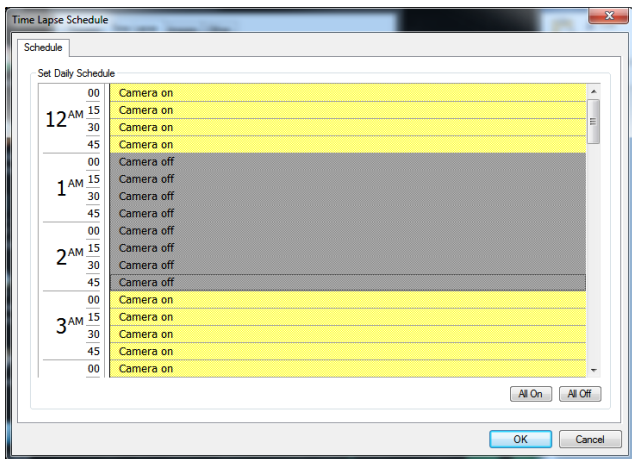
Images Tab
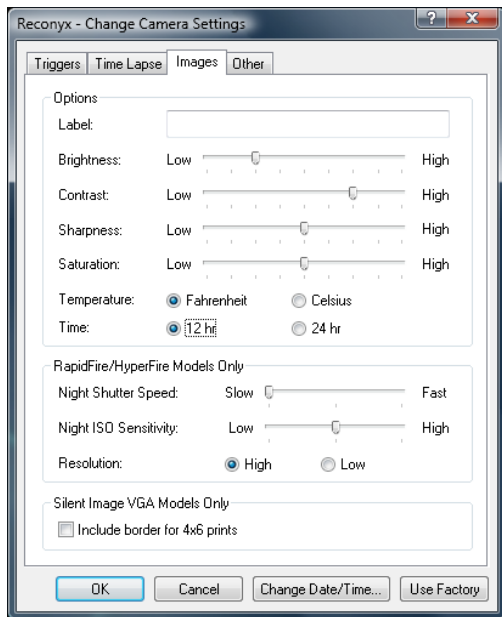
Options

To add your own text to the Lower Image Data Band, enter your **Label**.

*Note***:** The label can be a maximum of 20 characters and is added to the Image Data in *all pictures* your camera takes. You can change your camera's label at any time using "Change Camera Settings."

*Tip: You can use the **Label** to record your name or your organization's name on images. Also, if you have more than one camera, you can use the **Label** to record the location of the camera so that you can tell where a picture was taken simply by viewing the picture.*

To adjust the **Brightness**, **Contrast**, **Sharpness, and Saturation** levels that you want to use in your pictures, move your mouse cursor over the marker on the corresponding slider bar, click and hold your left mouse button, drag the marker to your desired level, and release the mouse button.

> *Note***: Brightness**, **Contrast**, **Sharpness, and Saturation** default to optimal settings for most outdoor photography. However, you can adjust these levels as needed. For example, you might adjust the brightness and/or contrast levels in a location where morning sunlight is unavoidably direct.

Brightness
is the amount of light in images. Pictures taken with higher brightness levels contain greater amounts of light.

Contrast
is the difference between dark and light tones in images. Pictures taken with higher contrast levels have a greater difference between dark and light areas, and fewer levels of gray between those areas.

Sharpness
is the difference between edges and contours in images. Pictures taken with higher sharpness levels show a greater difference between edges and contours of shapes.

Saturation
is how vibrant the colors will appear in an image. Pictures taken with lower saturation levels will have more subdued colors. Note: This option applies to color images only.

Temperature
Select **Fahrenheit** or **Celsius** to change the temperature scale your camera uses.

Time
To change the hourly display your camera uses, select **12 hr** or **24 hr**.

©RECONYX, Inc.

HyperFire™ & RapidFire™ cameras

Have the options available for setting your night time shutter speed, night time ISO sensitivity (gain), and image resolution.

- By default your HyperFire™ or RapidFire™ camera runs a 1/30th of a second shutter speed and Medium level ISO – resulting in good range and good image quality.

- If motion blur of your subjects presents a problem at this setting, you can increase your shutter speed to 1/60th or 1/120th of a second (medium and fast settings). This will reduce your range, but will also reduce your motion blur.

- If you need to gain some range back, you can increase your ISO setting to High. This will give you more range, but will also give you more grainy images.

- If you are doing close work and don't need the range, you can set your ISO to low and you'll get the best quality images possible.

- By default your RapidFire™ camera is set to high resolution. You have the option of running at low resolution. This has two advantages;
  1) your camera performance will increase (more frames per second), and
  2) you can store more photos on a card. The obvious trade-off is less detail in your pictures.

Silent Image™ cameras

Have the option to "Include a border for 4x6-inch prints"

> *Note*: This option is only available on the Silent Image RM30 and PM35 cameras. If you intend to print your digital images as standard photographs (using a photofinishing service), check *Include border for 4x6 prints* to prevent image cropping during the development process. Your images will be scaled with a border to size them properly for 4x6-inch prints.
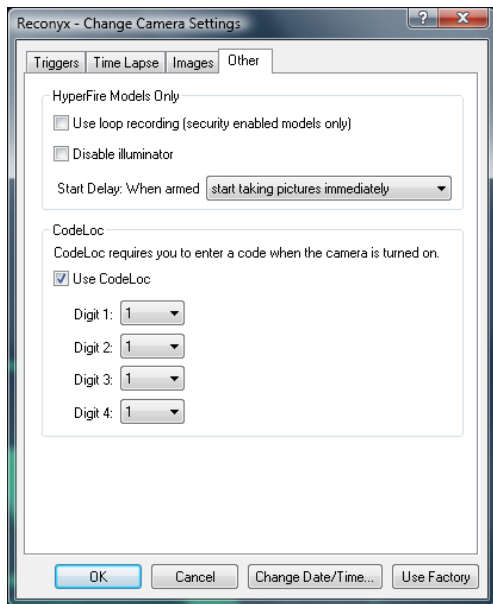
HyperFire™ Models Only

Use loop recording (security enabled models only): Loop Recording allows you to run perpetually without ever filling a memory card. The camera will overwrite the oldest images once the card is full.

Disable illuminator: Turns the illuminator off for night time images.

Start Delay: Allows you to set up the camera and wait a set amount of time before the camera arms.

*Note***:** The Start Delay setting is erased once the camera successfully arms.

CodeLoc

CodeLoc™ is a theft deterrent because if CodeLoc is enabled, the camera will not function until the proper password is entered.

CodeLoc uses a four-digit password sequence that you select. You can set the password on the camera under the Change Setup menu or use Change Camera Settings within this program.

*Note***:** CodeLoc™ does not *prevent* theft; it only makes a stolen camera useless to the thief. For this reason, RECONYX strongly recommends using a cable and lock to secure your camera against possible theft *at all times* when the camera is in the field.

To use a password sequence to activate your camera, check **Use CodeLoc,** and then enter or select a four digit code to be used as your CodeLoc password.

Tip: If you forget your CodeLoc password sequence, you can reset it using this program. The CodeLoc password cannot be reset without this software.
*If you're not using CodeLoc, un-check **Use CodeLoc.***

Saving and Transferring Settings to Your Camera

When you have finished customizing all of the settings for your camera, click **OK** to save your settings and close "Change Camera Settings." Your memory card now contains your camera's new settings.

The next time you turn on your camera *with this memory card inserted*, your camera will be programmed according to your customized changes and the camera will display "*Using Config*" when powered on.

After the camera reads the configuration file and reprograms itself, it will delete the file so that you don't inadvertently program another camera with these settings at some later date.

> *TIP: Programming multiple Professional cameras is easy. Just create one configuration and save it to multiple memory cards; one for each camera.*

> *Note*: Security model cameras and Professional model cameras use different configurations and different software to program those cameras. If you use the security configuration software, a professional model camera will not be able to read the settings on the memory card. Likewise, if you use the professional configuration software, a security model camera will not be able to read the settings on the memory card.

Disclaimer

While every effort has been made to ensure that the information contained in this "Help File" is accurate and complete, no liability can be accepted for any errors or omissions.

RECONYX reserves the right to change the specifications of the hardware and software described herein at any time without prior notice.

RECONYX makes no warranties for damages resulting from corrupted or lost data due to a mistake in operation or malfunction of the camera, the software, memory cards, personal computers, or peripheral device.

©RECONYX, Inc.