



HYPERFIRE™
HIGH PERFORMANCE CAMERAS

Security Camera Manual



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Camera Overview

Congratulations on purchasing a RECONYX™ Security camera. RECONYX™ has been the leader in motion activated digital surveillance cameras since 2002. Your HyperFire™ camera is a state-of-the-art digital camera, Passive Infrared (PIR) motion detector, and a night time infrared illuminator all contained in a secure, rugged, and weather-resistant case.

Thank you for putting your trust in us!

Contents of this package:

- HyperFire™ Camera
- MapView™ Professional and Security Scheduling software (CD-ROM)
- Adjustable bungee cord for mounting camera.
- This instruction manual.

Other things you will need:

- Secure Digital® (SD or SDHC) Memory Card
- 12 AA Batteries
NOTE: *The SC950 and SM750 cameras must be run on either Energizer® 1.5V AA Ultimate Lithium batteries or NiMH rechargeable batteries.*
- A computer, tablet, television, digital picture frame or other device to view your pictures.

Optional:

- Windows® PC to install and run MapView™ and the Scheduling Software.
-

NOTE: If you have any questions or concerns relating to the operation or functionality of your camera, please contact our Technical Service Department by email at support@reconyx.com or by calling toll free 866-493-6064.

HyperFire™ Specifications

	SC950	SM750
Purpose	General Surveillance	License Plate Capture
Illumination Range at night	No-glow Covert Infrared up to 50 feet	No-glow Covert Infrared up to 50 feet for License Plates
Images	3.1MP or 1080p HD color images by day; monochrome images by night	1.3MP or 720p HD monochrome images day & night
InstaOn™ Trigger Speed	1/5 second	1/10 second
RapidFire™ NearVideo™	Up to 2 frames per second	Up to 3 frames per second
Loop Recording	Available option: Continuous recording – older pictures overwritten by new ones	
SD Card Capacity	Up to 32GB: (4GB = approx 10,000 pictures)	Up to 32GB: (4GB = approx 30,000 pictures)
Software Included	MapView™ Professional & Security Scheduling Software	
Moisture Absorbing Desiccant System	Available for purchase	
Time-Lapse Surveillance	1, 2, 3, 5, 15 or 30 seconds or 1, 5, 15, 30, or 60 minute intervals (5 second minimum when motion trigger or illuminator is on)	
Motion Sensor Scheduling	Can schedule camera On or Off at 15 minute increments within all 24 hour periods. Two schedules available that can be assigned to different days of the week (i.e. different weekday schedule from weekend schedule).	
Customization Options (additional charges apply)	RTI-350 Wireless Trigger & Illuminator, Cellular Capability, External Power Jack, Camouflage Housing	
Warranty	1 year	



MapView™ Professional

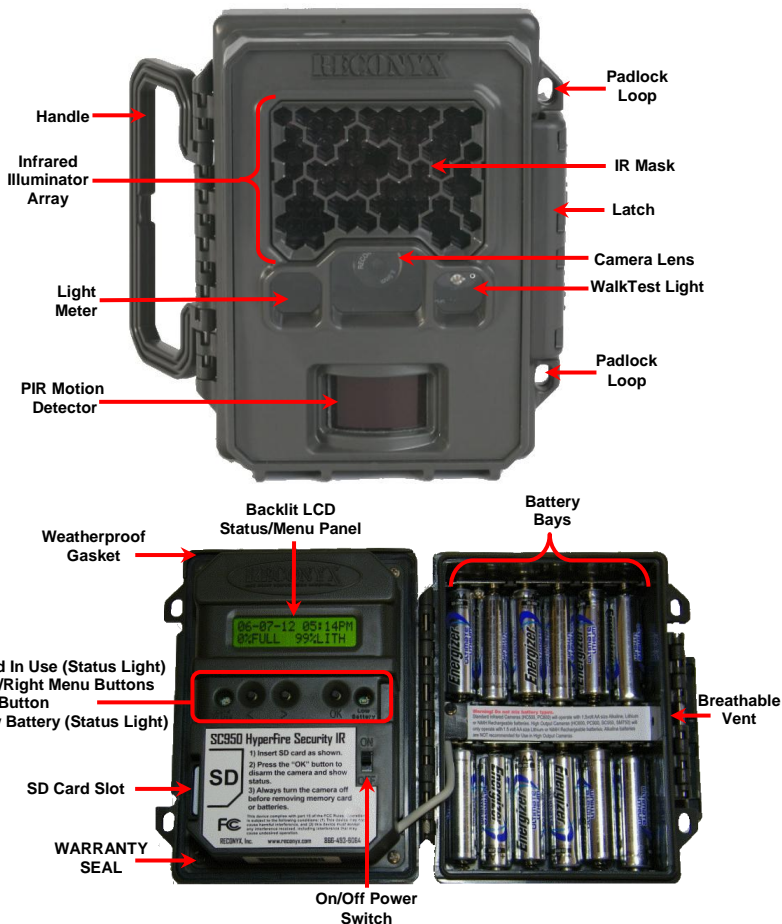
The SC950 and SM750 Cameras include the latest MapView™ Professional mapping and image management software with Google Maps® technology; allowing you to geographically organize and access your images. Our exclusive "power tagging" will allow you to easily define metadata and tag your images with data specific to your application. For more information, refer to the *MapView Professional User Guide*, accessible within the software. MapView™ Professional requires a personal computer running Windows XP®, Windows Vista®, or Windows 7®.



Security Scheduling

Also included is the "RECONYX™ Security Scheduling software" that allows you to schedule the camera on or off, for different times of the day and days of the week. This makes it very easy to set up differing weekday and weekend schedules.

HyperFire™ Controls & Parts Diagram



Batteries & Memory Cards

Accessing Batteries, Memory Card & Camera Controls

To install the batteries and memory card, your HyperFire™ camera is easily opened using the latch on the right side of the camera. Grasp behind the latch and flip it toward the front. The camera will open like a book, allowing access to the batteries, memory card and settings.

Step 1



Step 2



Step 3



NOTE: Security cameras come standard in grey – the camouflage housing is an available option.

Accessing Batteries, Memory Card & Camera Controls

There is a breathable vent underneath the latch of the camera, which will allow the air pressure inside the camera case to equalize while keeping water out.

NOTE: The breathable vent is vital to keeping the camera weatherproof and should not be removed or tampered with.

TIP: Each time you open your camera it's good practice to:

- *Make sure the gasket is seated properly and is clear of debris.*
- *Check that the breathable vent underneath the latch has not been damaged.*
- *Be sure that the windows on the front of your camera are clean.*
- *Be sure the latch is fully seated when closing your camera to ensure a weather-tight seal.*

Battery Specifications and Installation

Your RECONYX™ HyperFire™ camera runs on twelve AA-cell batteries. We highly recommend using either Energizer Ultimate Lithium batteries or high-quality NiMH Rechargeable batteries in your camera. Alkaline batteries do not provide as much power as Lithium or NiMH batteries and they are adversely affected by both hot and cold weather, so we do not recommend alkaline batteries.

NiMH will run at temperatures down to -20°F or colder. Lithium batteries will run to -40°F.

NOTE: We strongly advise that you not attempt to run alkaline batteries in the SC950 or SM750, as the performance will be very poor.

NOTE: Be sure to load batteries in the proper orientation (alternating positive/negative, six in each battery bay).



Warning! Do not mix battery types! Damage to the camera can result and your warranty will be voided if you mix battery types.

Battery Performance

Because camera settings, subject activity, individual battery performance and temperature all vary, there is no way to precisely predict a camera's run time, the total number of images that can be taken, or the temperature at which the camera will operate on any given set of batteries. Therefore the following table shows approximate values to be used as a guide in determining what type of batteries will best suit your needs.

NOTE: The values in the chart below were based on tests using 12 batteries; taking 50% daytime photos and 50% nighttime photos at 70°F.

<u>Battery Type</u>	<u>Operating Temperature</u>	<u>Number of Images</u>
		<u>SC950 and SM750</u>
AA Energizer Ultimate Lithium (1.5V)	-40° F (-40°C) and above	30,000 to 40,000
AA Rechargeable Nickel-Metal Hydride (1.2V, 2600MaH)	0° F (-18°C) and above	* 20,000 to 30,000

** High temperatures can reduce run time of NiMH batteries by 50% or more.*

TIP: You can purchase 1.5V Lithium batteries as well as RECONYX™ certified NiMH rechargeable batteries and chargers at www.reconyx.com.

Your camera will display the status of multiple battery types; be sure that the display is showing the same type of battery that you are using. You can change the battery type in the main menu, including Lithium (LITH) and Nickel-Metal Hydride (NiMH).



Secure Digital® (SD or SDHC) Card Specifications

A Secure Digital (SD/SDHC) card is used to store the pictures your camera captures. These images may be transferred to your computer using standard image viewing software or RECONYX™ MapView™ mapping and image management software.

TIP: Many digital cameras, GPS units, and cell phones can be used to view images taken by your HyperFire™ camera. No need to purchase a special purpose viewer! Keep in mind that many of these devices can only use up to 2GB SD cards.

Inserting and removing the memory card

Make sure the orientation is correct and that the card is aligned properly. Push gently on the memory card as shown below until it clicks into place.

Warning: Inserting the memory card upside down or backwards could damage the camera or the memory card. **Damage resulting from inserting the card incorrectly is not covered under warranty.**



To remove memory cards:

1. Press <OK> to disarm the camera (the battery status and number of pictures taken since last armed will be displayed on the LCD).
2. Switch the power OFF.
3. Press and release the card to partially eject the memory card.
4. The card can then be removed by grasping it with your fingers.

NOTE: Always disarm the camera (by pressing OK) and switch the power off before removing or inserting the memory card.

Memory Card - File System Requirements

Secure Digital cards have various speeds and capacities. Larger capacity cards are capable of storing more images. Your HyperFire™ camera can accept cards up to 32GB, but most users will find 4GB and 8GB cards to be more than adequate for normal use.

Cards with higher speed ratings are capable of reading and writing images faster. This is advantageous when taking RapidFire™ NearVideo™ sequences of images – especially when used in the SM750 for license plate capture.

Troubleshooting your memory card

If you have a memory card that does not seem to work, or you used the card in another device, you may have to re-format your memory card. This can be done with the included MapView™ software under the “Tools” menu item or with any Windows® Operating System.

Windows® – Steps to format memory card

Step 1: Insert your memory card into your computer's card reader.

Step 2: Click “Start -> My Computer”. You should see your memory card under the list of available drives. Be sure to check its contents first to make sure that you have the right drive.

Step 3: Right-click on the drive and choose ‘Format’.

Step 4: Under “File system” select the “FAT32” option then click on ‘Start’.

Step 5: Once the process is completed, take the memory card out and insert it into your Camera.

TIP: *We recommend that you purchase two memory cards per camera so that you can swap cards in the field.*

You can purchase RECONYX™ certified memory cards at www.reconyx.com

Setup & Programming

With the SD card inserted in the camera, turn your camera on using the **On/Off** switch.

NOTE: If this is the first time you've used your camera, it will automatically display the **Date/Time** setup change option, beginning with **Enter Year**.



Press the << and >> buttons to scroll through settings for each step (year, month, day, hour, minute, temperature type and battery type); pressing the **OK** button after each step is entered correctly.

TIP: *After the initial setup options are set, your camera is ready to take pictures. All you need to do is make sure your camera has a card and batteries installed, mount it to a tree, turn it on, close it up, and walk away. The camera will automatically arm and start taking pictures (with default settings) in two minutes.*

Default Settings

Your RECONYX™ HyperFire™ camera comes pre-programmed with factory default settings. By default the SC950 will take 3 pictures per trigger with a 1 second pause between pictures and no delay between triggers. The SM750 will take 5 pictures in RapidFire mode with no delay between triggers.

If you wish to change your camera's settings you can do so easily in the field at any time. Changes are easily made using the control buttons and the LCD display. Once you make selections, they are retained by the camera – even when the camera is off and the batteries are removed – so that you don't need to make selections again unless you want to change something.

NOTE: Throughout the manual, default camera settings are shown in **RED CAPITAL** letters.

NOTE: The Security Scheduling Software is used to set up the weekday/weekend schedules for the Security Cameras. By default they are always on. See the Scheduling software help file in the software for more information.

HYPERFIRE™ Programming Menu

Your camera includes two major levels of options:

Level 1: Main menu

Level 2: Advanced settings

The programming menus are set up so that the most commonly used items are at the top level. Other camera settings that are not as frequently accessed do not show up every time you are setting up or moving your camera.

NOTE: As with the date and time, you can move through and select any of the menu options by pressing the << and >> buttons to scroll, and the **OK** button when the menu or option you want to select is displayed.

TIP: Use the “Programming Diagram” on the next page for a better understanding of how the options are accessed on your HyperFire™ camera.

The backlit LCD includes two lines of information. The top line displays the menu, option, or setting you are currently accessing; after you make a selection, it may also display additional information. The bottom line displays the available options/settings. Selections you can choose from are always displayed between < > brackets on the bottom line.

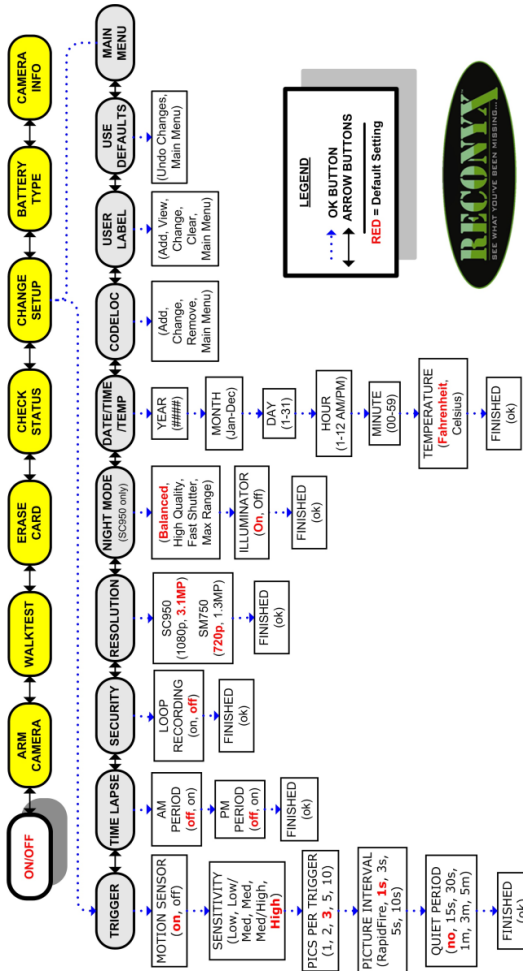


You can change your camera settings any time you like, either prior to using the camera, or in the field. Likewise, you can switch memory cards as needed, and check the remaining space on your memory card as well as your remaining battery power.



NOTE: The camera will remember the settings even when shut off, so you do not need to reconfigure the camera unless you want to change its behavior.

HYPERFIRE™ Security Camera Programming Diagram



LEGEND

••••• → OK BUTTON

↔ ARROW BUTTONS

RED = Default Setting



Level 1: Main Menu Items

NOTE: Main Menu Items are shown in **Yellow** on the Programming Diagram (Page 13).

Arm Camera – When you select this option, your camera arms in ten seconds, unless you cancel it before the countdown is complete by pressing the “OK” button.

WalkTest – When you select this option, your camera flashes an indicator light so that you can test its aim by walking in front of it. The WalkTest mode shows you exactly where the camera’s active motion detection zones are located. The tilt of the camera is critical, as slight changes are magnified at greater distances from the camera.

***TIP:** If left in WalkTest mode, the camera will automatically arm itself after 2 minutes with no motion events. This allows you to set the camera up, check its aim using WalkTest, and then just walk away.*

Erase Card – When you select this option, your camera wipes your entire memory card clean, removing all images and other information from the card.

NOTE: You should **NOT** select **Erase Card** unless you are absolutely certain you want to remove everything from the card.

Check Status – When you select this option, your camera displays the number of pictures it has taken, the amount of space used on your memory card, and the amount of battery power remaining.

NOTE: The battery status shows the level for different types of batteries. If you change battery types be sure to change the “Battery Type” setting.

Change Setup – Allows you to change the way your camera functions.

Battery Type – Allows you to select what type of batteries you are using to accurately display the amount of power remaining.

Camera Info – When you select this option, your camera displays its firmware version number (V) and serial number (S). You may need this information when contacting RECONYX™ with questions about your camera.

Level 2: Advanced Settings

NOTE: “Advanced Settings” are shown in **Grey** on the “Programming Diagram” (Page 13).

Trigger – Turn your camera’s motion sensor on or off, select the sensitivity level of the PIR motion detector, set how many photos you want your camera to take per trigger, the interval between pictures, and the quiet period (*the time period after a trigger during which the camera will not respond to motion events*).

1. **Motion Sensor** – **ON**, off
2. **Sensitivity** - low, low/medium, medium, medium/high, **HIGH**.
3. **Pictures Per Trigger** – 1, 2, **3**, 5, or 10 (**SM750 defaults to 5**)
4. **Picture Interval** – RapidFire, **1 SEC**, 3 sec, 5 sec, or 10 sec (**SM750 defaults to RapidFire**)
5. **Quiet Period** – **NO DELAY**, 15 sec, 30 sec, 1 min, 3 min or 5 min

Time Lapse – To control your cameras time lapse photography, select the starting and ending times, and the interval between pictures taken.

1. **AM Period** – on, **OFF**
2. **PM Period** – on, **OFF**
3. **Time Lapse starting and ending times** – one hour increments
4. **Picture Interval** – 1, 2, 3, 5, 15 or 30 seconds
or 1, 5, 15, 30, or 60 minute intervals
(5 second minimum when motion trigger and/or illuminator is on)

Security – Use this option to turn Loop Recording on and **OFF**. 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.

NOTE: When Loop Recording is enabled it will prompt to “Erase Card”. If you select “Yes” it will erase all contents on the memory card. If you select “No” it will disable Loop Recording. (This prompt will appear every time the camera is powered on.)

NOTE: 2GB or larger cards are recommended when using loop recording.

Level 2: Advanced Settings (continued)

Resolution – Set image size to 1080p or **3.1MP** (SM750 has **720p** and 1.3MP options available).

Night Mode - Adjust the night time exposure (SC950 only)

These settings will NOT affect daytime images.

- **BALANCED** - best combination to balance image quality, shutter speed and flash range
- High Quality - higher quality images, reduced flash range
- Fast Shutter - reduced motion blur, reduced flash range
- Max Range – increased range, reduced image quality

NOTE: SM750 does not have Night Mode option – it is optimized for license plate capture day and night.

Date/Time/Temp – Set date, time and temp. (**FAHRENHEIT**, Celsius).

CodeLoc™ – Use CodeLoc to add a four-digit security code to your camera to prevent unauthorized use of your camera in the event of tampering or theft. You can also change or remove an existing code.

TIP: *Write your four-digit CodeLoc code in the space available on the last page of this manual.*

User Label – Add a label (up to 16 characters) that will be included with all photos taken by your camera. You can also view, change, or clear an existing label.

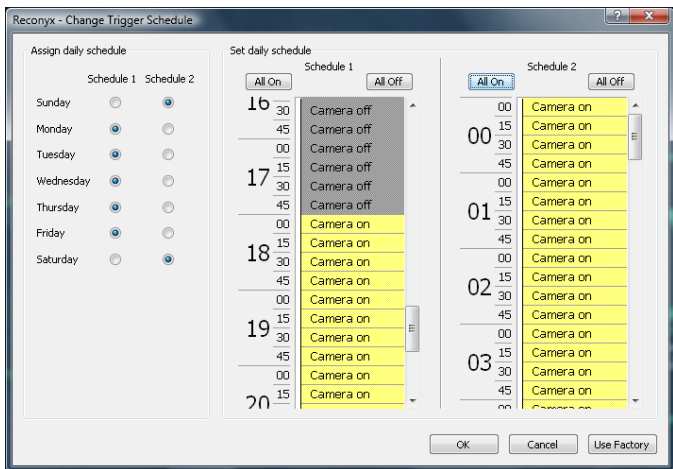
Use Defaults – Remove any changes you've made to your camera's settings and restore the factory default settings (shown above in **RED CAPITAL** letters).

Main Menu – Go back to the **Main** menu.

Scheduling HyperFire Security Series Cameras

You can schedule your security camera to be “On” and “Off” during different times of the day on different days of the week. These settings are available through the Scheduling Software that is included on the CD you received with your camera. The Help file, accessible with the (?), in the Scheduling Software explains your options for scheduling in more detail.

When you schedule your Security camera using your PC, the camera will display “SAVED SCHEDULE” when you switch the camera on with SD card that contains the Scheduling file inserted. The camera will remember these settings even when shut off, so you do not need to reconfigure the camera unless you want to change its behavior.



NOTE: If you have scheduled your camera from your PC it will say “USING SCHEDULE” when you turn it on. If you go back to Default settings in the Change Setup menu, your schedule will be wiped out and the camera will be “On” all the time. If you want to re-schedule, you will need to do this again on your PC.

Mounting Your Camera

Your RECONYX™ HyperFire™ camera can be mounted to a RECONYX™ VersaMount™, ThunderBolt™, or camera tripod by utilizing the threaded insert on the back of the camera housing.

The camera may also be mounted to a tree by using the included adjustable bungee cord (shown below). Simply thread the end without the loop through the “Lock Tunnel” on the camera and then install the included adjustable bungee hook to the length needed and fasten to the tree.

Mounting Camera with Adjustable Bungee Cord (included)



For general surveillance we recommend that you mount your camera about chest height. This is optimal for detecting people within the field of view of the camera as well as for accessing the camera's card, batteries, and controls.

If you are concerned about someone seeing the camera during daylight hours, you can mount the camera a bit higher and angle it down a little more. Most people do not often look up and therefore are less likely to notice the camera if it is mounted a few feet higher.

NOTE: It is highly recommended that you use a theft deterrent device such as a security box and/or a Master Python Lock™ to help secure your camera against possible theft when it is in the field.

TIP: You can purchase HyperFire™ compatible theft deterrent cables, locks and security enclosures at www.reconyx.com

Locking & Securing Your Camera

There are a number of options to securely mount your camera.

- 1) Use a Master Python Lock™ by threading it through the Lock Tunnel in the camera to secure it to a tree or another object. This will prevent the camera from being easily removed.
- 2) If you would like to secure the camera from being opened, you can use a small padlock in the “Padlock Loop” near the latch. For increased security, there are a number of security enclosures available: Including the standard “HyperFire™ Security Enclosure” made from 16 gauge steel; or the “Heavy Duty HyperFire™ Security Enclosure”, made from 1/8” steel.

NOTE: Both security enclosures feature a weather resistant powder coated finish, and are able to be lag bolted to an object and/or can be used with a Python Lock™ through the enclosure as well as the camera.

(Accessories not included)



HyperFire™ Security Enclosure

Master Python Lock™ w/padlock

TIP: Be sure to enable the Codeloc™ feature on your camera for additional security.

TIP: RECONYX™ sells an array of accessories for mounting, securing and disguising your camera to protect your investment; including Heavy Duty Security Enclosures, Padlocks, Python Locks™, Cable Boxes and more.

Go to www.reconyx.com for more information on accessories.

Aiming Your Camera

PIR Motion Detector

The Passive Infrared Motion Detector on your HyperFire™ camera is precisely aligned with the camera lens to give you the best chance of capturing subjects that come into the field of view of the camera, while not capturing pictures of anything that is not in the view of the camera.

The motion detector can detect movement up to 100 feet away. However, the detection range is dependent on the temperature of the source in relation to the ambient air temperature.

The HyperFire™ Motion Detector consists of two horizontal detection bands, as well as six different zones that cover the detection area.



For the camera to take a picture two things need to happen:

- 1) An object with a temperature different from the background temperature must be present within one of the red detection bands. (i.e. something warmer or colder than the ambient temperature).
- 2) That object (i.e. something with a different temperature) must be moving into or out of at least one of the six motion detection zones.

Using the “Walktest” Mode

Learning to use the Walktest mode is critical to being as successful as possible with your RECONYX™ camera. The Walktest mode allows you to precisely determine your camera’s active motion detection zones – ensuring your camera is aimed exactly where you want to capture animal activity.

- 1) Secure the camera to a tree or other object aiming the camera toward where you want it to capture pictures.
- 2) Put camera in “Walktest” mode, and close the camera.
- 3) Walk in front of the camera where you expect to capture pictures. Every time the red walktest light blinks it indicates that a motion event is taking place. If the walktest light does not blink where you expect it to, adjust the aim or location of the camera.
- 4) If possible, set up the camera so that no large trees or objects are in the main field of view of the camera. As it can adversely affect motion detection as well as night time flash range.

NOTE: All RECONYX™ cameras will self-arm from the “Walktest” mode after a two minute period during which it does not detect any motion events.

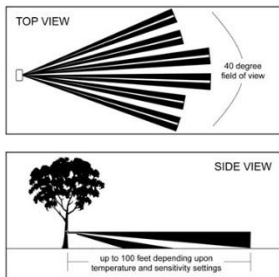
Aiming your SM750 Security Camera for License Plate Capture

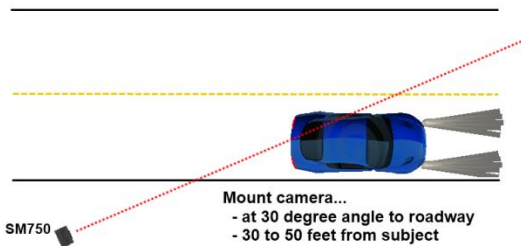
The SM750 is designed to capture license plates effectively during both daytime and nighttime when run in default mode.

For best results...

- Position the camera approximately 5 to 10 feet from the edge of the road looking at the back end of cars passing in the close lane.
- Cars should be travelling at no more than 50 miles per hour if you want to reliably capture plates.
- The camera should be mounted about 24-30 inches high and have it aimed approximately 30 degrees off of parallel. The diagram on the next page shows how you should set-up your camera.

PIR MOTION DETECTOR COVERAGE AREA



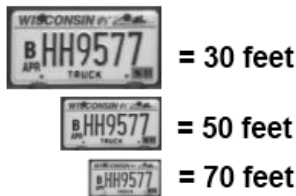


NOTE: The night-time illumination range of the SM750 is 50 feet.

NOTE: The camera may also be mounted higher up on a pole (~10 feet) since most people do not often look up and therefore are less likely to notice the camera if it's mounted above eye level. However, wake-up time and the number of photos per vehicle may be reduced when mounted in this manner.

Plate Visibility at Various Distances

When setting up your SM750, be aware that the further the camera is positioned from the subject, the smaller the plate will appear within the picture. Also keep in mind that the night-time illumination range is up to 50 feet.



TIP: Use the "Walktest" mode to be sure the camera is aimed correctly. After setting your camera up, it is best to drive by yourself at various speeds to see how your camera will react to a moving vehicle. You may find that you need to adjust your aim slightly after testing.

TIP: We also offer a modified Cable Box for use in camouflaging your camera in urban/suburban settings when setting up to capture license plates.



Image Data Information

Your RECONYX™ HyperFire™ camera stores Image Data along with every picture it takes. Some of this information is displayed in Image Data bands above and below the image.

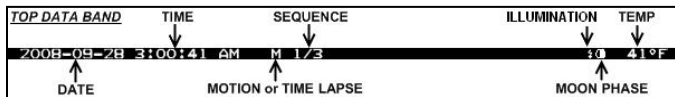
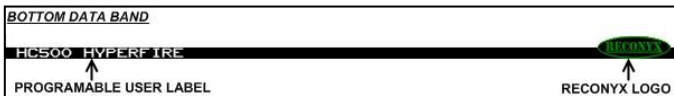


Image Data Bands



- An **M** or **T** in the top data band indicates a “motion” or “time-lapse” event.
- “**1/3**” indicates the first in a sequence of three pictures for that event.
- Moon Phases displayed include: ☉ (new moon), ☾ (waxing crescent), ☽ (first quarter), ☺ (waxing gibbous), ☀ (full moon), ☾ (waning gibbous), ☾ (last quarter), and ☾ (waning crescent).
- An “Illumination” ☼ indicator appears in the Image Data bands, when the infrared illuminator is used.

TIP: There is additional image data accessible using MapView™; including camera serial number, firmware version, battery voltage, and much more.

Additional Camera Options

IR Mask

If you need to clean the IR Array window, the IR Mask™ is easily removed by carefully inserting a small screw driver in the left or right side to pry it out.

Warning: Be very careful not to scratch the IR Array window!

To replace the IR Mask™, carefully line up one side of the IR Mask™ with the IR Array window. Then gently push on both sides until the IR Mask™ is completely seated against the window, and snaps into both sides.

The windows covering the IR Array, lens, walktest indicator and light meter, may all be cleaned with glass cleaner or water using a soft non-abrasive cloth.

NOTE: The IR Mask may also be removed to slightly increase the night-time illumination range. In addition, removing the IR Mask may make the camera appear more like a utility or monitoring device, to blend in better with the surroundings in which the camera is deployed.

High Humidity Environments

We recommend using the moisture absorbing “desiccant system” available from RECONYX™. The desiccant system is designed to absorb moisture that may get trapped inside the camera when the housing is opened in humid conditions. It is not intended to absorb water if the camera is opened in a rain storm, for instance.

The desiccant system can be used in any HyperFire™ camera. Additional desiccant pellets are available for purchase at www.reconyx.com

Security Series Hardware Options

There are many custom hardware options available to suit your particular surveillance need (additional costs may be associated).

Custom camera hardware options available from RECONYX include...

- RTI-350 Wireless Remote Trigger & Illumination Extender
- Cellular Capability
- External Power Connectors
- Telephoto Lens (2X) – Standard on the SM750
- Camouflage Housing

Troubleshooting

For answers to questions about your RECONYX™ HyperFire™ camera that you cannot find in this *Instruction Manual*, please check the RECONYX™ web site (www.reconyx.com).

Firmware Updates

You should also periodically check the RECONYX™ web site for firmware updates for your camera. We periodically release firmware updates with new features and/or performance enhancements. Updating firmware on the HyperFire Series cameras takes just a few seconds, and is well worth the effort to ensure your camera is performing at the highest level possible.

Limited Nighttime Range

If your nighttime range is less than expected, check to be sure your batteries are new or fully charged. You can also change your camera's night mode image setting to Max Range. Our specified night range values are based on the Max Range setting. If using Max Range doesn't resolve the problem, then try running either NiMH rechargeable batteries or Energizer 1.5V AA Ultimate Lithium batteries. Alkaline batteries cannot deliver enough amperage to power the illuminator consistently at night.

The physical camera setup is also important in getting good night time images. If you aim the camera out over an open field where there is nothing within range to reflect the Infrared energy back toward the camera, the images will appear very dark (like shining a flashlight into outer space). The best night time images will be captured when you have a backdrop of some sort that will reflect energy back toward the camera (e.g. trees, tall grass, fence, building, hillside, etc).

Focus Problems

If your images appear cloudy or out of focus, first consider whether there was snow or frost on the camera windows; you may wish to check your camera after a fresh snowfall to be sure the windows are not covered with snow. Next, check the windows for dirt and water spots, and gently clean them with a clean soft cloth and glass cleaner or water. Image clarity can also be adversely affected by very high temperatures, so it is a good idea to mount your camera where it will not be getting direct sunlight during the heat of the day.

False Triggers

If you seem to be getting false triggers, (i.e. the camera is taking pictures of nothing) first put your camera back to the default settings and try your camera again. This will ensure that you are running with known settings – with the motion detector ON at HIGH sensitivity and with Time-Lapse turned OFF.

If, after going back to default setting, you still seem to be getting false triggers, check the physical setup of your camera. The sun should not be shining directly on the face of the camera, and the camera's field of view should be cleared of as much vegetation as possible. False triggers most often occur on sunny, breezy days. Vegetation will soak up the sun's energy and it will become warmer than the ambient air temperature. Then, when the wind moves the vegetation, the camera sees this and cannot distinguish it from a warm-blooded person or vehicle moving in the scene. Careful placement and setup of your camera helps prevent false triggers.

Only as a LAST resort should you turn down your camera's motion sensitivity. This reduces your ability to detect movement of people, especially during the summer.

Camera Not Triggering

First put the camera back to Default settings and try arming again. This will ensure that you are running with known settings and will set the motion detector ON at HIGH sensitivity. This is important, especially in the warmer months, because as the background temperature approaches the temperature of the subject of interest, the strength of the signal decreases and the range goes down accordingly.

If you are still having trouble, please refer to the *“Mounting and Aiming Your Camera”* section for detailed information, as well as using the walktest mode.

It is important to keep in mind that there are other factors that can also affect the ability of your camera to detect motion. Wind can have a detrimental effect. Body heat can be quickly dispersed on a breezy day, making it more difficult for the camera to detect the subject. Also movement directly toward and away from the camera is less likely to trigger the camera than side-to-side movement. And, finally, if a subject is moving very slowly, it will sometimes not produce a strong enough signal within the sensor to trigger the camera.

Memory Card Problems

If your camera won't start up properly and/or displays a "card error", first check to be sure your card is not "Locked". On most SD cards there is a switch on the side of the card. If the card is locked, you will not be able to save any photos.



If you have other issues, you may have to try a different brand of memory card. We have found that some of the cheap memory cards are very slow (even if they say they are fast) and do not always run well. RECONYX™ certified memory cards are available at www.reconyx.com

NOTE: Memory cards 4GB and larger should be formatted with the FAT32 File System for use in your HyperFire™ camera. (See "Memory Card File System Requirements" for further information.) 1GB and 2GB cards can be formatted FAT.

Cold Weather Problems

If your camera shuts down in the cold, it may be too cold for the batteries. Refer to "Battery Specifications" for recommended battery types.

Extreme cold weather may have an adverse affect on the LCD display; this does not inhibit the camera's ability to function.

Battery Life Less than Expected

NiMH batteries have decreased life in hot weather. They will run the camera, but they will have decreased run time. It is not unusual to see battery life drop off 50% or more when daytime temperatures are near 90° Fahrenheit or higher. This will not damage your NiMH batteries; their charge just runs down faster.

If you notice that when your batteries run down the night time illumination decreases, you should change your batteries sooner and be sure to use fresh Lithium or fully charged NiMH batteries.

Other Questions?

If you have read this manual and checked our web site, and you still need assistance, please contact our Technical Support Department ...
866-493-6064 or e-mail at support@reconyx.com.

Warranty, FCC, and Safety Information

RECONYX™ Limited Hardware Warranty

- Security Series cameras have a **one (1) year warranty**.

If during this period, through normal use, a hardware product becomes defective due to defects in materials or workmanship, RECONYX™ will either repair or replace the product. This warranty is void if a product failure results from accident, abuse, improper use by Buyer, disassembly, or unauthorized maintenance and repair.

NOTE: There is a warranty seal on your camera; if this seal is broken or tampered with, the warranty is void.



RECONYX™ Limited Software Warranty

Software products are licensed to Buyer under the terms of the applicable RECONYX™ software license (contained within installation programs). If Buyer wishes to review the software license agreement before purchasing products from RECONYX™, a copy of the software license may be obtained by request.

Repair or Replacement

Buyer must obtain a Return Authorization (RA) number from RECONYX™ before returning any product(s) for repair or replacement. If RECONYX™ concludes that a returned product is not defective, Buyer will be notified, the product will be returned to Buyer at Buyer's expense, and Buyer may be charged for examination and testing of the product.

This limited warranty is the sole warranty for hardware and software products offered by RECONYX™ and RECONYX™ shall not be liable for any amounts for said products except in compliance with this warranty.

FCC Certification

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Safety Precautions

Before using the camera, please ensure that you read and understand the following safety precautions. Always ensure that the camera is operated correctly.

The safety precautions noted in this guide are intended to instruct you in the safe and correct operation of the camera and its accessories to prevent injuries or damage to yourself, other persons, and equipment.

Preventing Malfunction

Avoid Strong Magnetic Fields

Never place the camera in close proximity to electric motors or other equipment generating strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunctions or corrupt image data.

Avoid Condensation

Moving the camera rapidly between hot and cold temperatures may cause condensation (water droplets) to form on its external and internal surfaces. You can avoid this by placing the camera in an airtight, plastic bag and letting it adjust to temperature changes slowly before removing it from the bag.

If Condensation Forms Inside the Camera

Stop using the camera immediately if you detect condensation inside the camera. Continued use may damage the camera. Remove the memory card and batteries from the camera and wait until the moisture evaporates completely before resuming use.

Warnings

- Store this equipment out of the reach of children and infants.
- Do not allow water or other liquids to enter the interior of the camera. The interior has not been waterproofed. If the exterior comes into contact with liquids or salt air, wipe it dry with a soft, absorbent cloth. In the event that water or other foreign substances enter the interior, immediately turn the camera's power off and remove the camera batteries.
- Use of power sources not expressly recommended for this equipment may lead to overheating, fire, electrical shock, or other hazards.
- Do not short-circuit the battery terminals with metallic objects, such as key holders. It could lead to overheating, burns, and other injuries.
- Avoid using, placing, or storing the equipment in places subject to strong sunlight or high temperatures, such as the dashboard or trunk (boot) of a car. Exposure to intense sunlight and heat may cause the batteries to leak, overheat or explode, resulting in fire, burns or other injuries. High temperatures may also cause deformation of the casing.
- When using desiccant, the following precautions should be followed: Keep desiccant out of reach of children. Desiccant may cause eye or skin irritation; seek medical assistance for further treatment,
- Check your state/local laws concerning the use of this product.

Your Information and Camera Warranty Registration

Record Your Information

After you have familiarized yourself with this instruction manual, your camera, and software, you should record some basic information here so that you don't lose it. It is also a good idea to keep your purchase receipt in case you would need warranty work done on your camera.

Date Purchased: _____

Place of Purchase: _____

Camera Model: _____

Camera Serial #: _____

CodeLoc™ Password: _____

www.reconyx.com Username: _____

www.reconyx.com Password: _____

Register your Camera

Save A Stamp! Register Your HyperFire™ camera online today at www.reconyx.com/register or by sending in the information to:

RECONYX, Inc.
3828 Creekside Lane
Holmen, WI 54636

RECONYX™ HyperFire™ Warranty Registration

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Email: _____

Camera Model: _____

Serial Number: _____

Date Purchased: _____

Retailer: _____

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