

HYPERFIRE 2[™] 4G LTE Camera Manual



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Cellular Overview

The simplest and best way to use the RECONYX[®] HyperFire2[™] Series Cellular Camera is to sign up with the RECONYX[®] Cell Plan. Download and install the RECONYX[®] Connect[™] app from Google Play or the Apple App Store.

You can setup and manage your account, view your photos, change settings, see your camera status, & request a photo, all from the Connect™ app.

If for some reason you cannot use the Connect[™] app, you can send photos via email direct from the camera. This setup requires you to run separate software on a Windows PC to configure your camera. Images sent in this manner are not stored in your RECONYX[®] cloud account and are not accessible from the Connect[™] app.

Other things you will need before using your camera:

- Secure Digital[®] (SD, SDHC or SDXC) Memory Card (up to 512GB)
- 12 AA Batteries
 - <u>NOTE</u>: RECONYX[®] cameras should only be powered with either Energizer[®] AA Ultimate Lithium batteries or NiMH rechargeable batteries. There is also an External Power Jack included. This can be used with our Solar Panel Power Unit (available at <u>www.reconyx.com</u>) or other 12v external power source.
- Android or iOS device to run the RECONYX[®] Connect[™] app to setup your account, view your photos, and program your cellular camera.
- Activating your camera is done through the RECONYX[®] Connect[™] app.

<u>NOTE</u>: 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 <u>support@reconyx.com</u> or by calling toll free <u>866-493-6064</u>.

RECONYX® Cellular Plan

RECONYX® is your one-stop shop for your camera and cell plan.

There is no need to contact a cell carrier for activation or billing and no need to guess which plan option is best for you. Everything is handled directly through the RECONYX[®] Connect[™] app. Just open the app and tap the Add Camera button to get started. Within minutes you'll be up and running. From there you can manage your cameras, view your images and monitor your bill all from the same place!

<u>NOTE</u>: For the most current pricing and options go to <u>www.reconyx.com</u>.

Monthly Plan

Monthly access is just per camera and includes 200 mobile optimized images. Additional images are billed to your Shared Data plan.

Shared Data

Blocks of 2,000 mobile optimized images per month. Image blocks are shared across all RECONYX[®] cameras on your account.

NOTE: Each Full Resolution image counts as 10 mobile optimized images.

Cloud Storage

Images are stored in your secure cloud account and accessed with the RECONYX[®] ConnectTM app. 1 GB of storage included (approximately 20,000 mobile optimized images).

NOTE: Additional storage is available for purchase.

Remote Access

Manage your camera remotely from the RECONYX® app:

- View and manage images
- Check camera status*
- Change camera settings*
- Fetch Full Resolution images*

<u>NOTE</u>: * Remote Access functions will be performed the next time the camera connects to the network, which could be up to a day from when you make the request.

Our REAL-TIME ACCESS feature allows for these functions to be performed immediately.

Real-Time Access

Immediate Remote Access

REAL-TIME access allows immediate 2-way communication with your camera from the RECONYX[®] Connect[™] app. REAL-TIME upgrades include:

- Take a photo right now
- Check camera status at any time
- Change camera settings without delay
- Fetch Full Resolution images immediately

NOTE: Purchased on a per camera basis.

<u>Hibernate</u>

You do not have to pay for cellular access when your camera is not in use. With the RECONYX[®] plan, you can hibernate each camera for up to 6 continuous months per year with no cancellation or re-activation fees. Your saved images are still accessible in the RECONYX[®] app.

<u>NOTE</u>: When you wish to reactivate your camera, you will need to have your camera in hand and follow the onscreen instructions.

NOTE: Go to <u>www.reconyx.com</u> for current pricing and options.

Initial Setup

Install the RECONYX[®] Connect[™] app from Google Play for Android or the Apple App Store for iOS.

Once the App is installed you will be prompted to:

- 1. Setup your account
- 2. Add/Pair your camera(s) with your device
- 3. Add your account and billing information
- 4. Setup optional Image or Data Cost caps
- Decide what other optional services you would like to include. Including Shared Data and Real-Time Access

Once you have gone through these steps your camera is ready to be deployed and start sending you images.



Programming Options

Now that you have set up your account and programmed your camera, it's time to set up the camera the way you would like to use it. You have many options for programming your camera's behavior with the RECONYX[®] Connect[™] app.

Be sure to check the HyperFire2[™] User Guide for a complete list of all programming options as well as other tips on how to setup your camera.

Cellular Programming Options

Image Size:

- Mobile Optimized Resolution
 Counts on 1 photo toward monthly I
 - Counts as 1 photo toward monthly limit
- Full Resolution
 - $\circ~$ Sends full resolution photos
 - Counts as 10 photos toward monthly limit

Transfer Mode:

- Normal
 - Modem shuts down between events
 - $\,\circ\,$ Low traffic a few events per week
- Fast
 - $\,\circ\,$ Keeps modem connected to network at all times
 - $\,\circ\,$ Higher Traffic a few events per day
- Batch
 - Modem powers on and sends photos at specified intervals
 - $\circ~\mbox{Non-urgent}$ data transfer
- Status Only
 - $\,\circ\,$ Modem powers on once per day
 - $\,\circ\,$ Sends camera status

÷	Settings		Ŧ
Motion Even	ts (On)	-	*
Time Lapse	(0n)	-0	$\tau_{\rm C}$
Cellular			1
Day/Night			
User Label			-
Data Banda			
Resolution			10
Other			
Battery Type			
8			
	-		

Camera Details

Selecting "Cameras" in the app will give you additional information regarding the status of your camera. Including:

- Battery Life
- Cellular Signal
- SD Card Percentage Used
- Last Status, Date and Time
- Location
- Model
- Serial Number
- Firmware Version

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Check Signal Strength

When you deploy your cellular camera, you will want to check the signal strength to be sure the camera has a strong enough signal to send images.

Signal Strength Explained

Once a connection to the network is established the Reconyx[®] Connect[™] app will display the cameras dBm rating (signal strength).

Less than -113 96 to 112 dBm 86 to 95 dBm 76 to 85 dBm 66 to 75 dBm 0 to 65 dBm *approximate values	 Signal is too weak, camera will not attempt to send Camera will attempt to send Marginal Signal – should send photos, may take longer Acceptable Signal Good Signal Excellent Signal
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Request Image

Will allow you to take an image of what is in front of your camera and have it saved in your Photos in the app.

Aim Mode

This feature will allow you to check your cameras placement to be sure it is aimed correctly.

If you have "Real Time Access", you can enter Aim mode in the Connect app any time the camera is on and armed. The app will wake up the camera to start aim mode.

If you do <u>not</u> have "Real Time Access", you will need to put your camera into "Cell Aim Mode" using the menu <u>on your camera</u>. Once in Cell Aim Mode the camera will take and send a photo every 5 seconds, allowing you to adjust the placement of the camera to capture the area of interest correctly.

You can also "Show motion zone overlay" to see approximately where motion will trigger the camera.

<u>NOTE</u>: These images will not be saved to your photos for viewing later.



On Camera Error Messages

When using the camera, or when selecting the "Check Cellular" option, there are a few error messages that the camera may report on the LCD display. Including:

SIM ERROR	Sim missing, or locked from carrier with pin
NO SERVICE	= Bad APN, Incorrect carrier, or cannot connect to a tower
NO SIGNAL	= signal is bad, or no 3G/4G available
NO DATA SERVICE	= Account, or APN issue, or server is down
	= No security token, or picture limit reached
COULD NOT PAIR	= Account error (CANCELED, EXPIRED, TIMEOUT)
AUTH ERROR	= Login issue (Username or Password)
ERR: ##	= Modem error codes

<u>NOTE</u>: "Bad APN" could also mean that the incorrect carrier was selected and does not match your SIM

Sending Pictures

When the camera is triggered it will take the number of photos specified in the trigger settings. Once the sequence is finished the camera will then send the photos.

Mobile Optimized photos will be transmitted to the RECONYX[®] Connect[™] app. If you would like the HD/full resolution photo you can request them within the app.

NOTE: Full resolution photos are always saved locally on the SD card.

<u>NOTE</u>: The HL2XC (License Plate Camera) will send full resolution photos by default.

NOTE: Full Resolution Photos count as 10 photos toward monthly limit



Battery and Power Specifications

Your RECONYX[®] HyperFire2[™] Cellular camera runs on twelve AA-cell batteries. We highly recommend using either Energizer[®] Ultimate Lithium batteries or high-quality NiMH Rechargeable batteries. You should <u>NOT</u> use alkaline batteries as they do not provide as much power as Lithium or NiMH batteries and are adversely affected by both hot and cold weather.

External Power Jack

Your camera also includes a water-tight External Power Jack that is located on the bottom of your camera. You will need to have clearance on the bottom of your camera for the included power cable (our mounting systems and security enclosures are perfect for this).

The cable has pigtails on the end so you can connect the red wire to the positive (+) side and the black wire to the negative (-) side (ground) of a battery or other external power source.



Connecting to anything higher than 18 volts could damage your camera and will void your warranty.

Input power supply should be able to deliver 4 amps of current at 12 volts.

We highly recommend having a fresh set of Energizer[®] Ultimate Lithium batteries installed in the camera even when running with external power.

By having both internal and external power sources available, <u>the camera will decide</u> <u>which power source to use based on which has the greater voltage</u>; thereby avoiding a camera shutdown due to an external power failure.

TIP: The **Solar Panel Power Unit** available at <u>www.reconyx.com</u> is an ideal solution to power your cellular camera via the external power jack.

<u>NOTE</u>: The external power connection is totally independent of the internal batteries and <u>DOES NOT</u> deliver a charge to the batteries; even if rechargeable batteries are used internally.

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 <u>approximate values</u> to be used as a guide in determining what type of batteries will best suit your needs.

If your Camera is in an area where it is not seeing a lot of activity and subsequently is not sending a lot of photos, it may run for 6 months or more. Run time is very heavily impacted by how many pictures are taken and sent.

<u>NOTE</u>: The values in the chart below were based on taking 50% daytime photos and 50% nighttime photos at 70°F.

Battery Type	<u>Operating</u> <u>Temperature</u>	Number of Images
AA Energizer Ultimate Lithium (1.5V)	-40° F (-40°C) and above	3,500 to 7,000
AA Rechargeable Nickel-Metal Hydride (1.2V, 2600MaH)	0° F (-18°C) and above	* 1,500 to 4,000

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

NOTE: Battery life can vary greatly depending on signal strength.

TIP: You can purchase 1.5V Lithium batteries as well as RECONYX[®] certified NiMH rechargeable batteries and chargers at <u>www.reconyx.com</u>.

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

Troubleshooting

No Photos Sent: If after setting up your account and programming your camera, it does not send you any photos:

- Check to be sure you have adequate signal strength using the "Check Cellular" option onboard the camera.
- Make sure that your account is setup properly through the Reconyx[®] Connect[™] app. New accounts can take up to 2 hours to be active.

Poor Signal Strength: If you are getting inconsistent results it is most likely due to poor signal in the location where the camera has been deployed. Try to relocate the camera to another location. Sometimes moving the camera just a few feet can make a significant difference in signal strength. You can check the signal strength by going to "Camera Details" in the Reconyx[®] Connect[™] app.

Other Questions: If you have followed all the steps in this guide and are still having trouble, please call our Technical Support team at (866) 493-6064. Or send an email to support@reconyx.com.

<u>Disclaimers</u>: Any attempt to modify the camera from its original configuration will void the warranty.

Safety Precautions

Before using the camera, please ensure that you read and understand the following safety precautions. 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. Always ensure that the camera is operated in conformance with these user instructions.

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

- Do not allow water or other liquids to enter the interior of the camera. 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.
- Check your state/local laws concerning the use of this product.

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.

IMEI Number:	
ICCID (SIM) Number:	
Phone Number:	
Camera Serial #:	
CodeLoc™ Password:	

Register your Camera

Your new HyperFire 2[™] camera is covered by a 5-year warranty. In order for the warranty to take effect, you must register your camera online within 90 days of purchase at <u>www.reconyx.com/warranty</u>

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