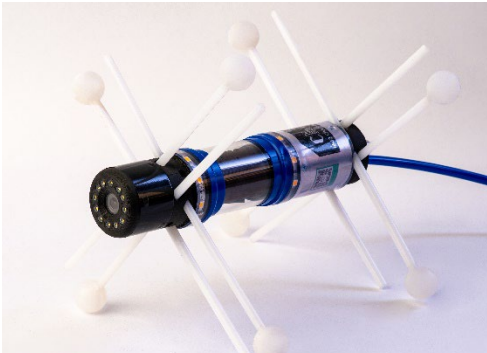


# Chim-Scan®

## CLOSED CIRCUIT Internal Evaluation System

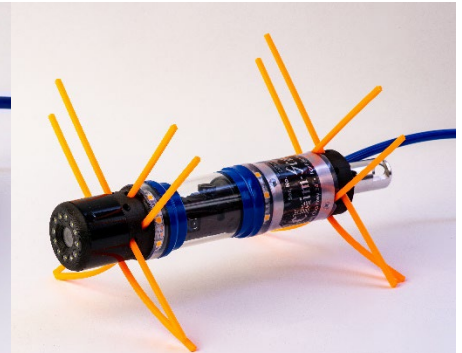
### Product Manual



J3D SHOWN WITH W/ WHITE  
STABILIZERS FOR LARGER FLUES



J3D W/ WITH WHEELS FOR ROLLING  
THROUGH THE THIMBLE



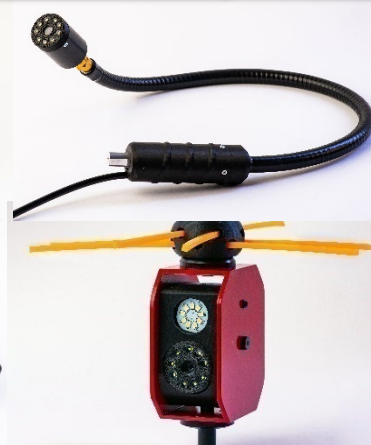
J3D INCLUDES BUILT-IN ORANGE  
STABILIZERS FOR SMALL FLUES



211 CONTROLLER WITH  
BATTERY PACK AND  
OPTIONAL KEYBOARD



100 CONTROLLER WITH  
BATTERY PACK AND  
OPTIONAL KEYBOARD



ENVIRO CAMERA WITH  
GOOSENECK (ABOVE) AND  
ENVIRO IN CHEESEBIT



LIGHTHOUSE TILT  
SHOWN WITH WHITE  
STABILIZERS

## Estoban Corporation

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SCPMN7.23

# Table of Contents

Description	Page No.
Terms & Conditions, Warranty, Precautions, and Repairs & Upgrades	2-5
Technology, Uses for Chim-Scan® Cameras, Video Scanning/Interpretation & The Five Principals for Proper Scanning	6-8
Becoming a Chim-Scan® Factory Trained Technician	9-11
Scanning Patterns in Liners	12
Best Viewing Angles and Angles of Imagery	13-15
Using the Monitor/Controller	16-20
Camera Options	21
Chim-Scan® Enviro Camera	22
Lighthouse™ Tilt Camera	23
Lighthouse™ & J3D Camera Specifications	24
Replacing the Lighthouse™ or J3D Camera Lens Cover	25
J3D Camera	26-27
How to Care for Your Chim-Scan® System	28
Battery Pack and Charging	29
Keyboard	30-33
How to operate the SD Recorder	33
Capturing, Previewing, and Deleting Images	34-38
Navigating Recorder: Date & Time, Images, Recording, Playback, System Settings	38-42
Transferring photos to an iPad via an SD Adapter	43-44
Add-Ons and Replacement Parts	45-49
Troubleshooting	50-51
Upgrades & Repairs	52-57
Chim-Scan® Rentals	58
Credit Card Authorization Form	59

# Estoban Corporation

*Manufacturer of Specialty Vision Equipment*

## TERMS AND CONDITIONS OF SALE

### **All goods include a manufacturer's warranty only:**

- All returns must be made within seven (7) days and must be accompanied by a sales invoice and return authorization number (R.A. #) issued by Estoban Corporation. Estoban reserves the right, at its discretion, to pro-rate a refund instead of repairs or replacement.

### **All returns include a fifteen (15) % restocking fee on new units:**

- Merchandise for refund or replacement must be in the original packaging, containing the correct serial and model numbers, instruction manual, and accessories.
- A twenty-five (25%) non-refundable deposit must accompany all special order items.
- No returns or refunds on special order merchandise
- Estoban Corporation has a twenty-five to fifty dollars minimum fee for handling and shipping. Any merchandise returned to us must be on a prepaid freight basis only.
- Accounts are subject to a 1.5% service fee per month.
- Factory repair requires a minimum fee of \$95.00 plus all shipping charges for all merchandise. Estoban does not undertake repair at the customer's site.

### **To return any equipment for repair:**

- Call the repair center for authorization at 1-641-472-7643.
- Please fill out the Repair Form on our website ([www.chimscan.net](http://www.chimscan.net)) or print out the repair form and send it with the unit.
- Repairs received with no note or repair form (whether in the box or by email) move to the end of the line.
- Estoban Corporation's minimum bench charge to check or *give a repair estimate* is \$95.00. We credit *estimates* towards final repair charges.
- On equipment returned for repairs (past warranty), such as a camera image sensor, focus mechanism, tilt mechanism, monitor repairs, and control box, repairs completed are subject to a 30-day repair warranty only. **All shipping charges are your responsibility.**
- Cable repairs are not under any warranty and are not subject to the thirty (30) day repair guarantee.

### **All repairs - prepaid or credit card basis only (including credit card fees).**

All the above terms and conditions are effective 4/23/15 and revised on 6/07/23.

# OUR WARRANTY

Estoban products, when operated under normal conditions of use, are warranted by Estoban to be free from defects in material and workmanship.

Warranty specifications apply from the date of purchase from Estoban or an authorized Estoban representative or distributor.

This warranty does not cover subsequent re-sale and claims after the warranty period.

**Unauthorized extensions of warranties by the customer shall remain the customer's responsibility.**

Specifications are as follows:

All SD Recorders, LCD screens, and Digital Recorders carry a *one-year limited warranty (shipping not included)*.

All *Fixed Focus, Auto Focus, Remote Focus cameras, imaging chips, and interior L.E.D. lights in these models* include a one-year parts and labor warranty (*shipping not included*).

All control boxes carry 1-year parts and labor (*shipping not included*)

All L.E.D. Exterior lights carry a 90-day warranty for parts and labor (*shipping not included*).

**All warranties are void if you don't use the whiskers, Blowfish, or special brushes supplied by Estoban.**

Estoban warranties do not extend to any goods or parts subjected to misuse, modification, lack of maintenance, or damage resulting from fire, flooding, lightning, explosion, or droppage.

THIS EXPRESS WARRANTY EXCLUDES ALL OTHER WARRANTIES OR REPRESENTATIONS EXPRESSED OR IMPLIED BY ANY LITERATURE, DATA, OR PERSON. THE MAXIMUM LIABILITY OF ESTOBAN UNDER THIS EXCLUSIVE REMEDY SHALL NEVER EXCEED THE COST OF THE SUBJECT PRODUCT, AND ESTOBAN RESERVES THE RIGHT, AT ITS SOLE DISCRETION, TO PRO-RATE A REFUND INSTEAD OF REPAIR OR REPLACEMENT.

Estoban IS NOT RESPONSIBLE OR LIABLE FOR INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, however arising. This responsibility includes but is not limited to those for the use of any products, loss of time, inconvenience, lost profit, labor charges, or other incidental or consequential damages to persons, animals, business, or property, whether as a result of a breach of warranty, negligence or otherwise.

**All prices and design specifications are subject to changes without written notice. This manual is copyrighted by Estoban Corporation. We do not allow copying any part of this manual without written permission from the Estoban Corporation. Send all directives to 1643 Old Hwy 34, Fairfield, IA. 52556**

**Phone: 641-472-7643, E-mail: [info@chimscan.net](mailto:info@chimscan.net) Website: [www.chimscan.net](http://www.chimscan.net)**

# Precautions

- Do not operate Chim-Scan® systems in **ambient** temperatures exceeding 122 degrees or lower than 14 degrees.
- Keep Units at room temperature at all times for proper operation. **Extreme temperature\* changes** cause *erratic operation* and can lead to malfunctions.
- Don't leave a unit in a truck when temps are *below 32 ° or above 80°*. Best way to remember - If you're Hot or Cold, so is your Chim-Scan®, and treat your Chim-Scan® like your phone. If it's been *hot or cold*, give it time to adjust to the job site's temperature.
- Use the unit for appropriate levels of inspection. Do not use it in wet areas.
- **DO NOT CUT** the grounding prong on the power supply plug or modify powers or cables; this voids all warranties if done. Use caution for all 120V applications.
- Do not abuse the cable connectors. Never yank them apart when disconnecting.
- Do not submerge the system in any water or use it outside while it's raining or snowing without proper protection.
- Do not break the seals on cameras, monitors, LCD screens, or control boxes. THERE ARE NO USER-SERVICEABLE PARTS INSIDE. *ALL warranties are Void if any seals are broken.*
- For the best application and proper visibility, sweep the chimney before scanning.
- **DO NOT** lay anything on the LCD that may crush the screen - this damages the screen beyond repair. (NON-WARRANTY REPAIR)
- Do not force the S.D. card into the slot - this can cause the SD Card to break the shield on the S.D. Recorder and then fall into the controller.
- Do not (try to) remove the Monitor or S.D. Recorder from the case. Removing it causes damage, and the whole unit needs to be sent to Estoban for repair. **All Warranties are void!**
- Use a stabilizer at all times on the camera, whether it is a whisker, Blowfish, or soft bristle chimney brush. Exception: In other conditions where the only opening is under 2", the Chim-Scan® Enviro Camera can be used without stabilizers, and the warranty still applies.

## **WARRANTY IS VOID IF A STABILIZER IS NOT USED**

**Because of the unit's expense, list these units on your business insurance under *Inland Marine* for theft and damage. Look for and record the serial number on this equipment and keep it in a safe place.**



**CAUTION!**

**Secure Camera Equipment in all applications - if NOT secured, Damage or Personal injury can occur.**

# Repairs & Upgrades

If you break any part of your camera system, we can fix it. If you want an upgrade, we can do that also. For more info, see pages 53-58.



Techs – Connect with us on online chats ([www.chimscan.net](http://www.chimscan.net)) or via Social Media (QR Code below) or call us at 641-472-7643.

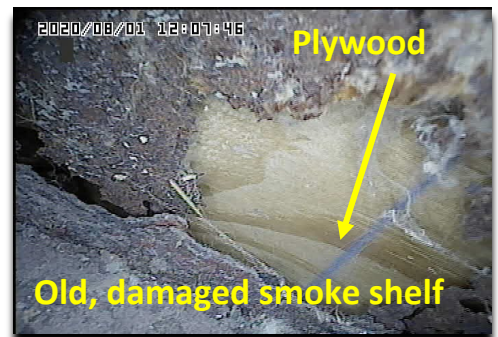


# Chim-Scan® Cameras aren't just for Chimneys.



**Attics and Crawl Spaces:** You can use Chim-Scan® Cameras in hard-to-reach places like attics or crawlspaces. The camera, at right, is attached to a flexible Gooseneck Rod. The Gooseneck can be attached to rods that you use to guide the camera to inspect these areas away from your reach.

**Smoke Shelves:** The pictures at right represent a Heat-form Type Fireplace Smoke Shelf. It is a 20-year-old unit that experienced a chimney fire. We installed it in our lab with a piece of plywood behind it as a



source for educational scans and to draw attention to the degradation. It exemplifies what happens when excess heat breaks down metal when exposed to moisture. By the way, the structure where the heat form was located was also destroyed.

**Inspecting Chases Without Removing the Chase Cover:** You can use Chim-Scan® Cameras to inspect



questionable areas like a chimney chase that appears to have damage. Inspecting chases through the chase cover is easy with the Chim-Scan® Enviro Camera. Just drill a 1.5" or 2" hole into the chase cover and feed the 1.4" diameter Enviro Camera into the hole. Then, plug the hole with a readily

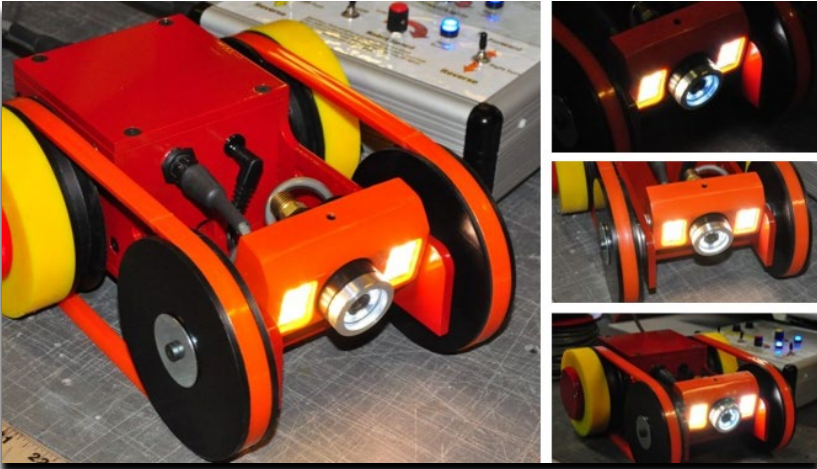


available plug and seal around it with high-temperature silicone if desired. The

images below are from the Enviro Camera.

**Miscellaneous Uses:** The Enviro Camera allows you to scan an interior heat exchanger in a Category I gas furnace. It is useful for other applications, such as scanning through a stove baffle and inspecting the interior of a chimney chase.

## Chim-Scan® Cameras aren't just for Chimneys, Continued



We manufacture robotic cameras for other purposes. Using the Chim-Scan® Enviro Camera, the camera is installed on a motorized vehicle and travels through air ducts or crawl spaces. If you require something unique, we can create it.

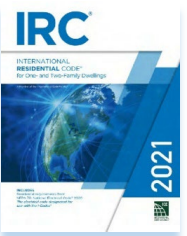
Here are just some of the industries that use Chim-Scan® Cameras: Chimney Sweep Companies, Masonry Contractors, HVAC Duct Cleaning, General Contractors, Fireplace Retailers, Fire Restoration, Forensic Engineers, Testing Laboratories,

Historic Restoration, Inspection Companies, Professional Engineers, Enviro Companies, Inspection of Historical Cannons, and the Agricultural Industry.

## Video Scanning/Interpretation

Video scanning is a process. Following a path from one chimney section to the next provides a complete close-up picture of the chimney construction and what could be happening within the chimney. Each chimney tells a story, and it is up to you to define and share the documentation in a manner the homeowner can understand.

The chimney camera position or angle plays an essential part in familiarizing yourself with the new perspective. A 90-degree side view angle produces sharp close-up details of specific areas within the chimney. If scanning from the bottom, such as the hearth or firebox, pushing the camera up using a rotational camera head, you can see 360° and 180° in a tilt. You can flip a switch to look straight up or flip it again to rotate the head and orient it to view the sidewalls.



Once the operator becomes familiar with the equipment and the visual perspectives the system reveals, you will need to obtain and apply the installation requirements from a documentable source. This source may be the installation requirements set forth by the manufacturer for the various chimney products or systems you inspect. These instructions pertain to the manufacturer's prefabricated fireplaces and chimneys but also apply to chimney liner systems, whether stainless steel or cast-in-place. Before you make a judgment call on a prefabricated part, NFPA 211 or I.R.C. may cover this, but a better bet would be to reference the product installation manual. For masonry installations, follow the guidelines set forth by the individual building codes (local codes) and the

inspection guidelines outlined in the current **NFPA 211**, Chapter 14 and Chapter 15, and the **INTERNATIONAL RESIDENTIAL CODE (I.R.C.)**, especially Chapters 10 and 18 are of great benefit.



# The Five Principles Needed for Proper Scans

When performing interior chimney scans, it is essential to follow a procedure. If you omit this process, the results can be interpreted as unbelievable. Our products have a history of providing the essentials to produce imagery that can be repeated and documented. If the operator does not comply with these principles, the scan can have undesirable results that are not credible.

**Clarity of Image** - The Chim-Scan® Cameras have a fixed focal range with stabilizers that keep the camera stable without adjusting the focal range for clear images. If the images are blurry, it can discredit your documentation.



**Blurry Image - No details**

**Clear Image - Damage details**

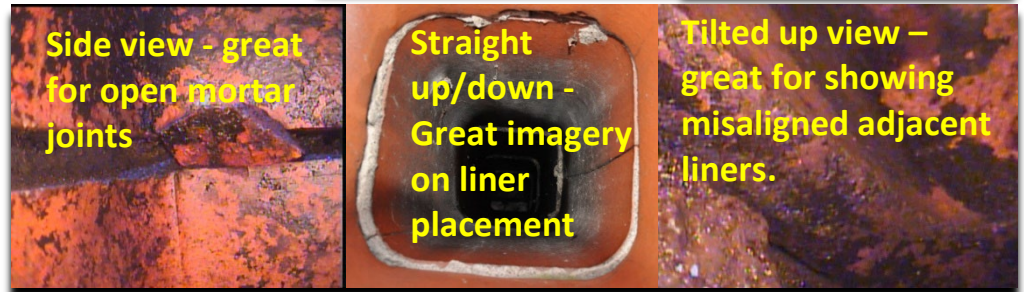
**Illumination** - All the systems are provided with specially designed L.E.D. Lights built into the camera with lighting adjustment controls at the control box. Our L.E.D. lights provide bright illumination to light up the dark flue corners—preventing hot spots.



**Image too dark to see details.**

**Image light enough to provide details.**

**Position** - The Lighthouse™ Tilt and J3D Cameras You do not have to continuously hold a button to adjust the speed and rotation of the Lighthouse™ Tilt or J3D cameras. You can position these cameras to scan from 0° up to 45° degrees up or 45° down. This tilt feature makes adjusting the camera as easy as the flip of a switch or turn of a knob. With the Lighthouse™ Tilt Combo or J3D Camera, you can flip a switch to change the view from the flue side to view the chimney straight up or down.



**Side view - great for open mortar joints**

**Straight up/down - Great imagery on liner placement**

**Tilted up view - great for showing misaligned adjacent liners.**

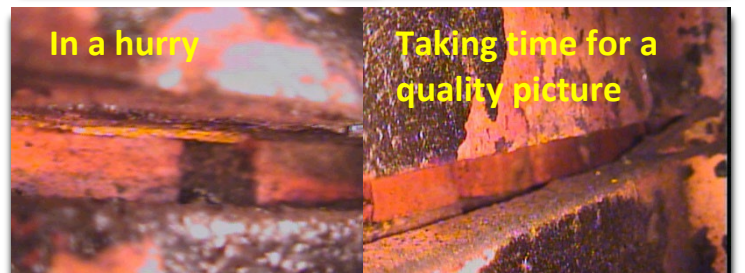
**Stability** - Each Lighthouse™ and J3D cameras are supplied with a set of adjustable stabilizers built into the camera to keep it stable within the chimney. This stabilization prevents wobbling, avoiding incomplete and erratic camera movement.



**An unstable camera equals blurry pictures.**

**A stable camera provides clear, detailed pictures.**

**Delivery** - The operator controls this part of the scan. It is best done by using our scanning process and moving the camera at a rate that is understandable to the audience. Our manual includes an outline of this scanning process in five individual modules consisting of different installation types.



**In a hurry**

**Taking time for a quality picture**

# Becoming a Chim-Scan® Factory Trained Technician

Using the Chim-Scan® System can show your customers the interior of their chimneys in previously unseen areas. Becoming a Chim-Scan® Factory Trained Technician shows you care about their chimney installation. It is also a unique factory training certificate to share with the local building inspector and insurance officials.

There are many benefits of becoming a Trained Chim-Scan® Technician:

- You may be able to get lower insurance coverage rates.
- You receive a *certificate* showing your Certification and the number.
- You receive a copy of our *Chim-Scan® Technician Logo* for your advertising use.
- You will receive access to our special *invitation-only* Facebook Group and access to special webcasts.
- Within this group, you receive notifications of our NEWS, including:
  - Blogs
  - Innovations and developments
  - Videos
  - Business building tactics
  - Articles
  - Updates in scanning technology

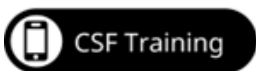


The test is an open book and multiple choice based on this guide, the Chim-Scan® Manual, and knowledge of the Chim-Scan® System. Each question is worth one point. Since this is an open-book test, 85% of correct answers are passing scores.

You can take the test online. Once you finish the test (100 questions) and press the Submit Button, you will receive your pass/fail at that time. Your Certificate of Completion is ready to print directly off the site. You can take it up to two times before you incur an additional charge.

Here is the breakdown of the test and manual cost:

- ✓ The training Manual is \$200 in print form, including the test for one person (there is a retest fee if the test needs retaking more than two times).
- ✓ For each test, it is only \$50 for each individual from the same company. For information on taking the test, scan the Q.R. code below, visit our website at [www.chimscanfactorytraining.com](http://www.chimscanfactorytraining.com), or give us a call to order at 641-472-7643.





# Samples of our Interior Chimney Scanning Manual

Our book begins with:

## I – The Ideal Chimney & Verification.

## II - Best Viewing Angles.

III - The Probable Cause of the Defect which includes The Pathways to Deterioration & Criteria.

## I -V Completion of Interior Scanning & Comments

## V - Access Points for Interior Chimney Scanning.

Preparation for Scanning includes PPE, protecting the customer's home, and equipment.

In each module, we provide information to help identify parts, what to look for, and in some cases we show defects for diagnosing issues in each module.

Not all installations are the same. Each one is different. But as the installations change, the defects remain the same. This training provides a step-by-step chimney scanning process.

We breakdown the methods of scanning into five modules where we cover what to look for including conditions and defects:

- Scanning for a Masonry Fireplace
- Scanning for a Masonry Fireplace with an Insert or Hearth Stove
- Scanning for a Masonry Thimble chimney Serving an Appliance – Solid or Liquid Fuels
- Scanning for a Prefab Fireplace
- Scanning for a Prefab Chimney Serving an Appliance – Solid or Liquid Fuels

Our manual includes *photos of actual scans done in the field*, the camera angle from which the picture was taken, and a description of the defect and what caused it to happen.

### Module 5, Scanning a Prefabricated Chimney with Solid or Liquid Fuel Appliance(s)

#### Connections

Look at the connection from the appliance to the pipe. Is it securely connected?



Note the size of the connector pipe relative to the appliance flue collar. A stovepipe that is smaller than the appliance flue collar should be noted in your report. Depending on the

installation, you may need to remove the connector pipe to begin the scan. Ensure a drop cloth covers the appliance and the floor below the thimble.

Color Box Index		Green = YES	Red = NO
B	Blue= NON-Applicable	O	Orange = NON-Accessible
CONNECTOR PIPE (P/C)			
	Single-Wall	Double-Wall	Direct Vent
	Secured properly?		
	Sloped properly?		
	Appropriate for appliance?		
	Sized properly?		
	Offset?	# of Offsets	
	Clearances in accordance with mfr. label?		
This information is the same for solid and liquid fuel applications			

#### Important Considerations Specifically for Liquid Fuel Appliances

What appliance(s) is the chimney venting?

For oil fuel, check the connection of the connector pipe from the appliance to the thimble. Be sure the barometric damper blade swings freely. Remove the connector pipe to begin the scan. If there is a tee cap and access at the bottom tee, you can remove the cap and scan from there without moving the connector.

The connector pipe can be scanned using the Utility Camera with a Gooseneck Rod. Hold the barometric door open, bend the Gooseneck Rod and insert it thoroughly into the Barometric tee. Look both ways in the connector and check for any soot or blockage.

If there is a Type B Gas Vent with a tee cap, scan from there. This will be easier since you will not have to take the connector pipe apart.

Wrap the connector pipe in a drop cloth and carefully set it aside. Ensure a drop cloth covers the appliance and the floor below the thimble. Take extra precautions with oil flues. They contain sulfur soot that smears easily and is unhealthy to breathe.



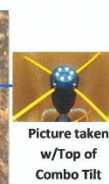
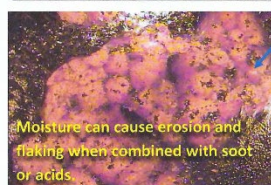
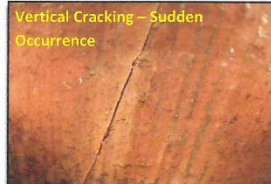
Gas appliances usually use single-wall galvanized or double-wall B-Vent Pipes as a connector. The connector pipe needs to be removed before the scan.

In some localities, two oil appliances may share the same flue if it complies with flue sizing and other requirements. Check local codes for specifications. In the case of scanning in a ceiling support installation, tape a garbage bag to the bottom of the support. Leave or create an opening in the bag. Then insert the camera through this opening and scan the flue. Any debris should fall into the bag.

Color Box Index		Green = YES	Red = NO
B	Blue= NON-Applicable	O	Orange = NON-Accessible
APPLIANCE and CLEARANCES (P/CAP, PCMA, PCG)			
	Does the Appliance start correctly?		
	Clearances visible on mfr. label?		
	Clearances in accordance with mfr. label?		
	Other appliances connected?		
	Appliance attached to chimney?		
	Installed on non-combustible floor?		
	Wall protection acceptable?		
	Floor protection acceptable?		
	Barometric damper installed?		
	Operate Freely?		
	Draft hood in place?		
	Allow dilution air?		

### Module 4, Scanning a Masonry Thimble Chimney with Solid or Liquid Fuel Appliance(s)

#### Masonry Flue Tile Defects Continued

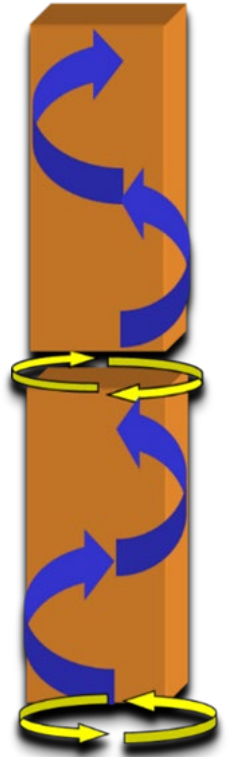


# Scanning Patterns For Liners

## Masonry Flues

A majority of the time, chimney defects include bad joints and cracked liners. When scanning the masonry flue tiles and joints, some companies record a video when scanning straight up. This method helps you see offsets, misaligned liners, and blockages, giving you a quick view of what you may run into. Once at the top, flip the switch to take images of damage as you descend. Raise or lower the camera so the joint appears in the center of the screen. Rotate 360° around the joint (see image, right). When using a Lighthouse™ Tilt or J3D Camera, the camera will rotate for you automatically.

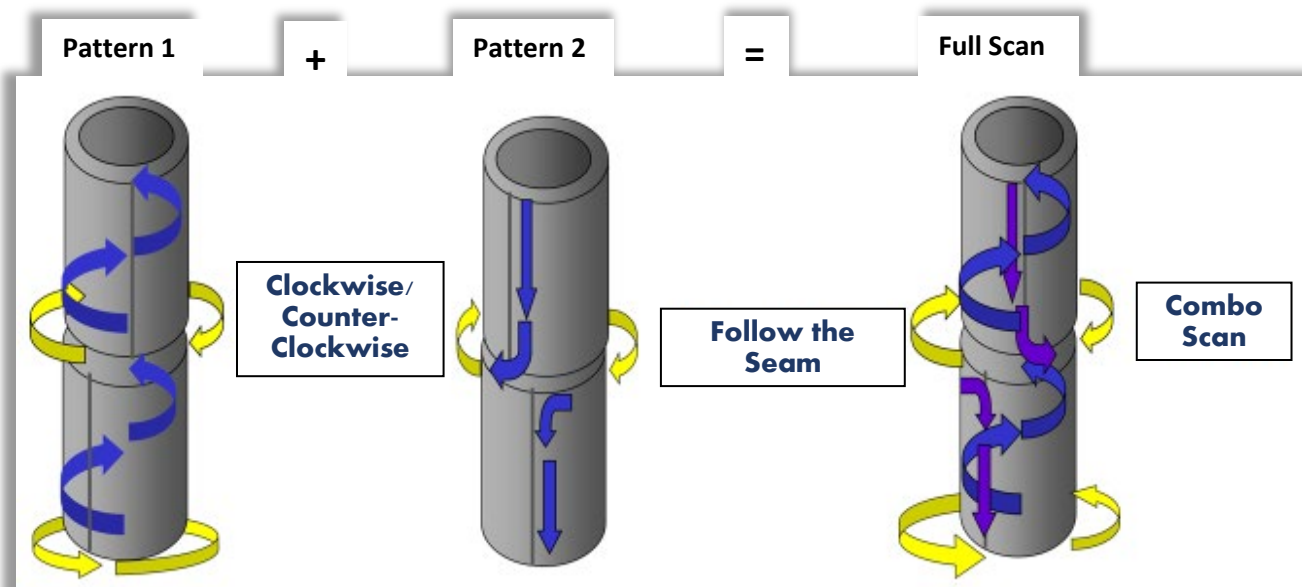
When scanning with the Enviro Camera, turn the camera clockwise in a barber pole movement by hand. If you turn clockwise barber poling up the liner, turn the camera 360° counterclockwise to unwind the cable around the rod at each joint. Reversing direction at each joint prevents cable twisting and entangling around the rod, which could lead to breakage. It also lowers your frustration level. Once you have completely scanned the flue, lower the camera, and disconnect the rods so the cable rests on the floor. This method works well in square and round liners. Always keep the camera cable in the same hand as the rod!!



When scanning, it is important to note where you start scanning (from the top, or bottom). Number each tile to keep track of the condition and the pictures related to a particular tile (Flue & Hearth Notes™ Inspection Checklist includes this option). Also, documenting your findings based on a starting direction helps when reviewing the images and so the process of documenting is not hindered.

## Round Flues

There are ways to create a procedure for scanning round stainless liners and prefab chimneys. The first is to push the camera up in a barber pole rotation within the flue. The other is to follow the seam of the liner. It is best to combine the two approaches, do one scan going in one direction on each section, and switch rotation direction upon the return as you lower the camera. This way, it accounts for all the side's seams, joints, and abnormalities.



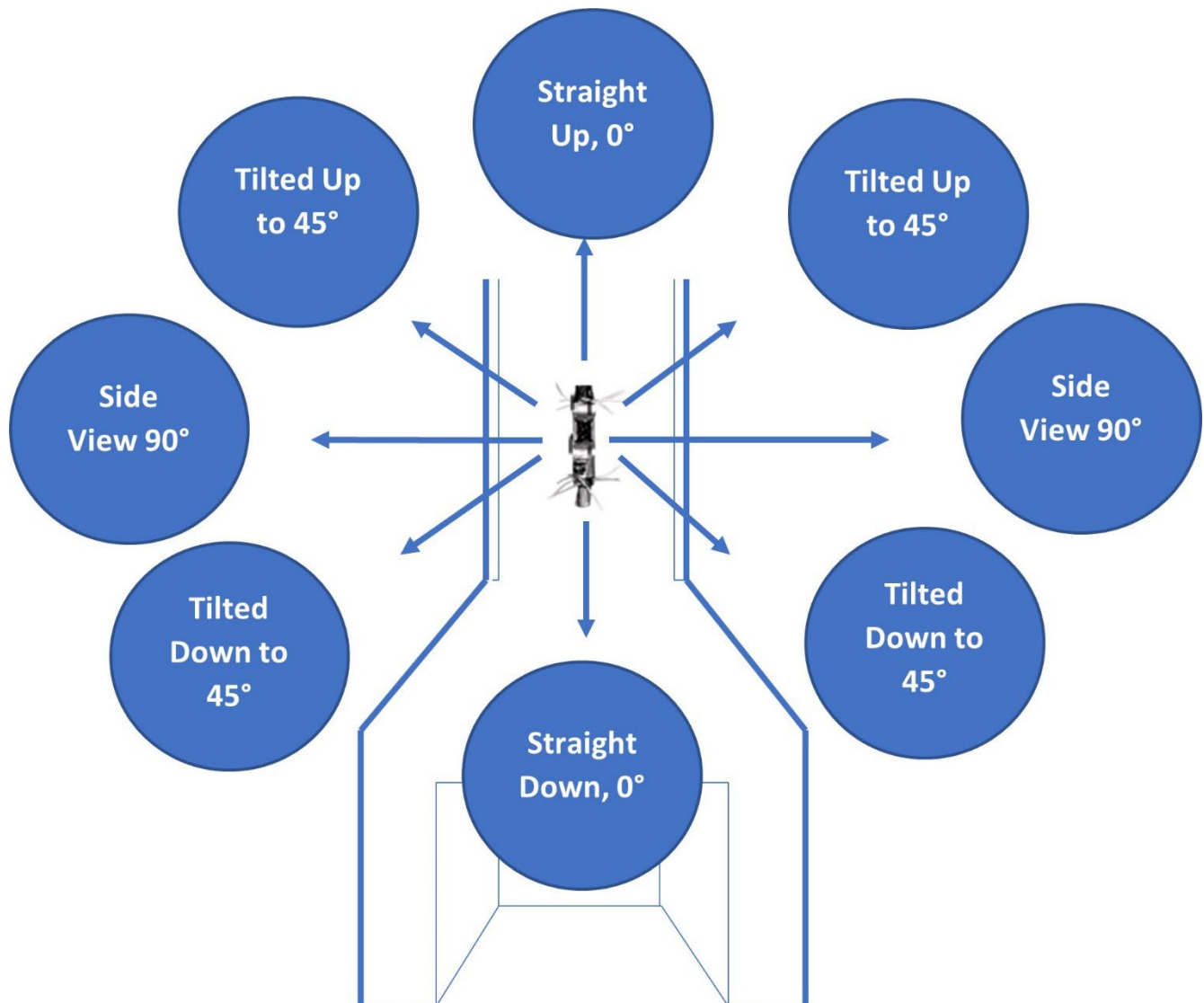
# Best Viewing Angles & Angles of Imagery

## Best Viewing Angles

Chimney camera inspection systems may have non-rotating heads, rotating heads, stabilizers, image and video options, variable lighting, recorders, and a host of other accessories to provide the means to scan the chimney's interior. Please refer to your chimney camera's operation manual to attain proper operation and results. You may ask, "Why so many options?" – such as speed and the ability to swivel the chimney camera head to any angle to produce the best image. The answer is to optimize each photo opportunity so you can focus on the details of the defect. Clear photos eliminate doubt when you show the homeowner. Options also decrease the time spent scanning and ensure you have the images needed. Time is money!

## Angles of Imagery

One of the most important parts of interior chimney scanning is understanding the optimal angle to capture an image or video. To understand the angles we refer to, it is best to understand how we refer to them. For reference, when the chimney camera is traveling straight up (or down) the chimney with the lens facing forward (up), we call this a straight-up/down view. A tilted view is when the lens is angled up to 45° up or down. A 90° view would be a side wall view (horizontal). Please reference the chart below for a visual explanation.

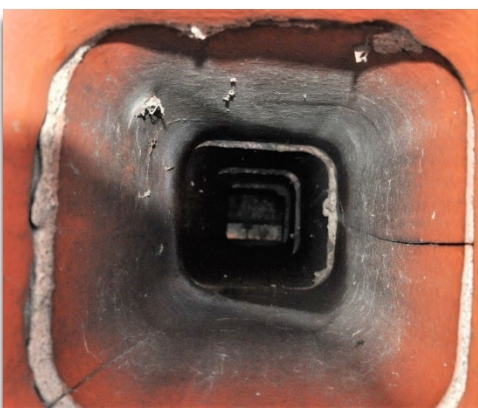


## Best Viewing Angle - Masonry Chimneys

With our Lighthouse™ Tilt and J3D chimney cameras, the viewing angle and rotation provide the opportunity to see the defect from different angles with the tilt option. The most common defects seen in a masonry chimney are in the following chart, which includes the recommended viewing angles. Some defects require multiple angles to obtain the best diagnosis.



Defect	Ideal Angle(s) - Straight Up/Down, 45° Tilted Up/Down, 90° Side View), 135°
Misalignment of masonry flue tile liners	Tilted up to 45° Up or Down
Open/defective mortar joints between two liners	90° Side View
Protruding mortar joints	Tilted to 45° Up/Down or Straight Up/Down View
Vertical cracking	Tilted to 45° Up/Down, or 90° Side View
Horizontal cracking	Tilted to 45° Up/Down, or 90° Side View
Transverse cracking	Tilted to 45° Up/Down, or 90° Side View
Missing masonry flue tile pieces/openings in liner	90° Side view
Flaking liners	Tilted to 45° Up/Down, Straight Up/Down, 90° Side View
Flaking & severely cracked cast-in-place (not crazing)	90° Side View
Poor adhesion from resurfacing process	Straight Up/Down or 90° Side View
Animal intrusion	Straight Up or Down View
Unlined chimneys	Tilted to 45° Up/Down, Straight Up/Down, 90° Side View
Water damage	Straight Up/Down, Tilted 45° Up/Down or 90° Side View(s)
Efflorescence	Straight Up/Down, Tilted 45° Up/Down or 90° Side View(s)
Hidden breaching	90° Side View
Scorch marks on liners	90° Side View



Although you can see cracks, misaligned liners, and a little protruding mortar from a straight up/down view (left), looking straight on at a 90° side wall view (right) shows close up details. Viewing from a tilted view up to 45° shows open mortar joints which may reveal defects not visible with other angles. The chart above provides for optimal viewing.



## Best Viewing Angle - Prefabricated Chimneys

With our Lighthouse™ Tilt and JH3D chimney cameras, the viewing angle and rotation provide the opportunity to see the defect from different angles. Here is a chart of the defect and optimal angle of view to provide a good image requiring less interpretation on the operator's part. The following chart and the recommended viewing angles are for the most common defects seen in prefabricated chimneys and stainless steel liners. Some defects require multiple angles to obtain the best diagnosis.

Defect	Ideal Angle(s) - Straight Up or Down, Tilted Up/Down to 45° or 90° Side View.
Seam separation and/or deterioration	90° Side View
Disconnected joints or components	90° Side View or Straight Up/Down View
Missing components	90° Side View
Damaged joints	90° Side View
Rusting & embrittlement	Straight Up/Down, Tilted to 45° Up/Down or 90° Side View(s)
Improper connection at the joint	Straight Up/Down View or 90° Side View(s)
Warping	Straight Up/Down View
Corrosion of metal	90° Side View
Pipe out of round or damaged before installation	Straight Up/Down View, or 90° Side View(s)
Moisture damage	Straight Up/Down, Tilted to 45° Up/Down or 90° Side View(s)
Pinholes in the pipe	90° Side View
Pipe damaged by sudden occurrence – chimney fire	Straight Up/Down, Tilted to 45° Up/Down or 90° Side View(s)
Pipe damaged by sudden occurrence - storm	Straight Up/Down, Tilted to 45° Up/Down or 90° Side View(s)
Manufacturers defect	Straight Up/Down, Tilted to 45° Up/Down or 90° Side View(s)
Wear & Tear from years of use.	Straight Up/Down, Tilted to 45° Up/Down or 90° Side View(s)

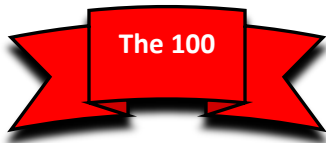
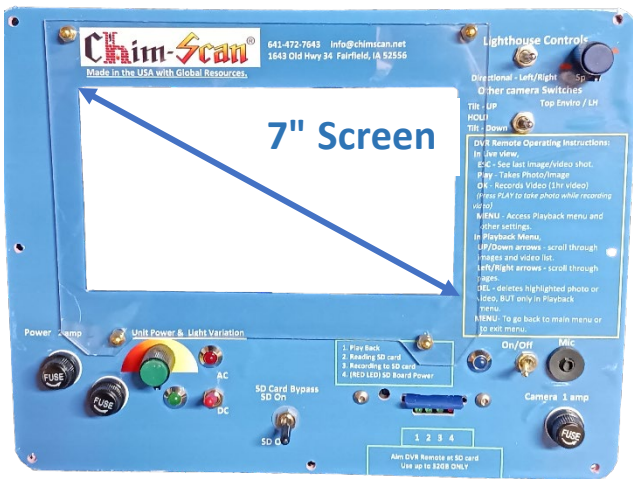
**Great example of a 90° Side View - Cracking in stainless steel chimney section inner wall.**



**A 90° Side View shows how much separation is between this connection.**



# Series 100 & 211 Controller Layouts



The following pages break down the controller into different sections explaining the purpose of each switch and button. Next, we review cameras and the corresponding switches. Both Controller/Monitors have the same options, except the **211 has a 10" screen**, and the **100 has a 7" screen**.

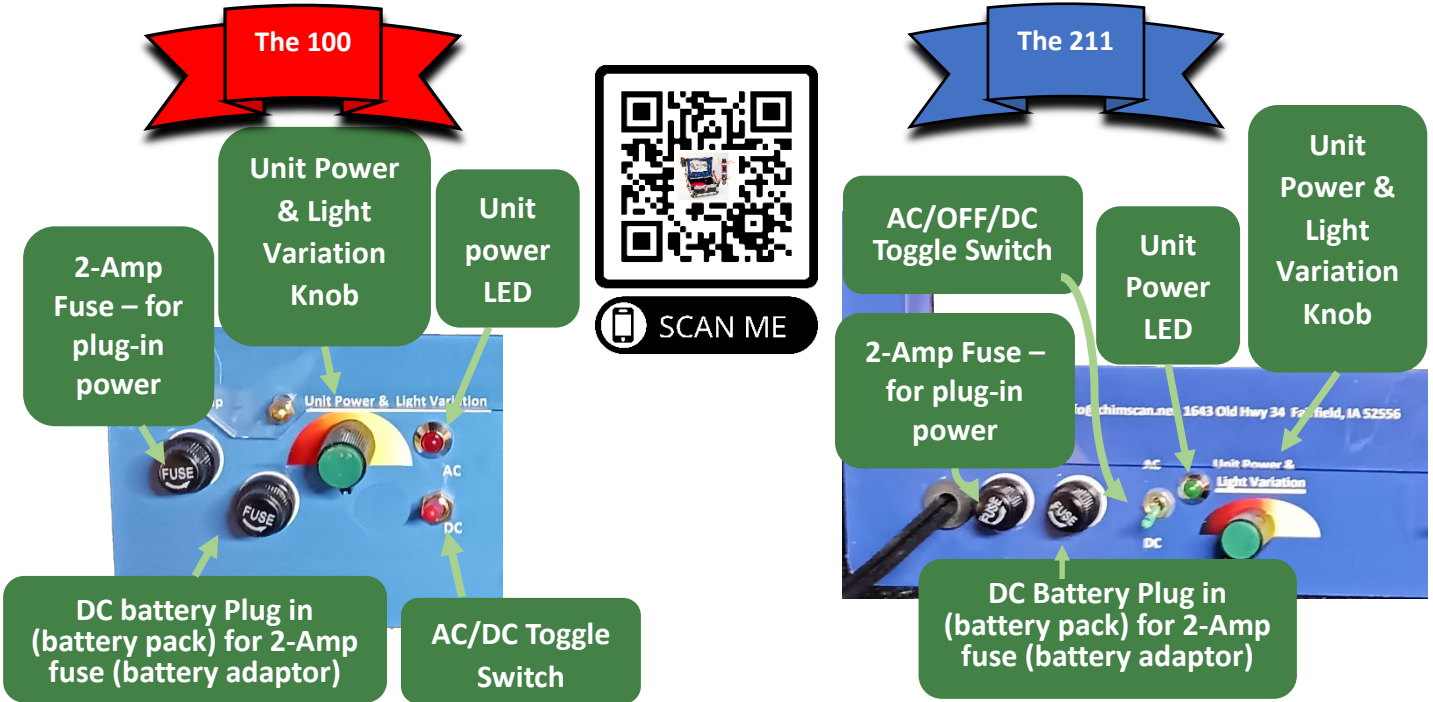
**Remember, if your unit doesn't have a switch, it isn't necessary for your type of camera.**

**Both units** have the following features:

- S.D. Recorder with the following:
  - 4 G.B. card
  - Remote control.
  - Capability to take pictures, videos, or both.
  - Microphone for narration
  - Date and time that shows up on the screen and in pictures.
- There is fuse protection for both the camera and the controller.
- 50-foot cables included (longer cables and extension cables are available).
- The monitor/controller is built based on the camera you purchase and includes the appropriate switches. See the pages listed below for more information.
  - Lighthouse™
  - Lighthouse™ Combo
  - Combo Camera
- Units are upgradeable regardless of how you purchase them.
- You can choose the 100 or 211 in a **Basic Unit**. A Basic Unit has **No S.D. Recorder** which means it has no recording ability. Call us for more information 641-472-7643. We can upgrade a Basic Unit if you want to add the S.D. recorder later.



# Unit Power, Light, Variation & Monitor



Plug the cord into a 120-volt grounded receptacle (wall switch) or the 12VDC (battery pack). **Check if your AC/DC switch is in the correct position.**

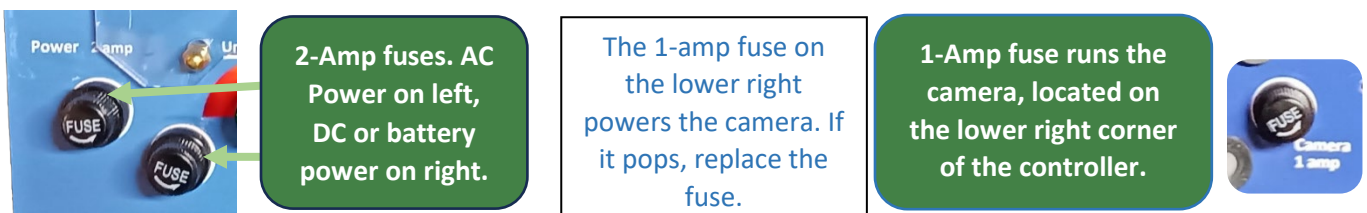
- Rotate the power knob clockwise to power the controller. The LCD monitor comes on, and the **monitor must stay on AV1**. AV1 displays in the top left corner of the screen when you turn on the unit.
  - Use only appropriate chargers for style and type of battery.
  - If using the battery adaptor, use the battery for which the camera was specifically adapted.

The 2-AMP fuse helps protect the flow of electricity to the unit. If it '**Pops,**' that means the unit has received a surge. Should this happen, turn off the unit, replace the fuse, and turn the unit back on. If it doesn't turn on, check whether the extension cord or power strip is plugged directly into the wall and the circuit breaker. If it still doesn't turn on, call 641-472-7643.

**The new (tool) battery adaptor has a 2-AMP fuse which is replaceable.**

## Controllers & Fuses

In the lower-left corner of the controllers, there are two fuses. The 2-AMP fuse on the left is for the monitor and camera power. If it pops, likely, the unit wasn't plugged into a power strip. The 2-AMP fuse on the right is for the battery pack. If it pops, replace it, and if this repeats or if more than one fuse pops, call us 641-472-7643.



# Bypass Switch

The 100

SD Card Bypass Switch



The 211

SD Card Bypass Switch



The **SD Bypass switch** provides an option for situations below freezing should the S.D. not want to work. This switch comes into play when service techs are in the field during winter. S.D. recorders are like cell phones; they don't like the cold. So, if you leave the unit in the service vehicle overnight and 32°F outside, you can understand why we put this switch in! By bypassing the recorder, you can use an external device like your phone or digital camera. It's better than a return trip! How to use the S.D. recorder is on pages 34-43.

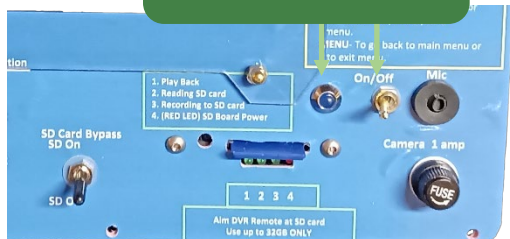
# Microphones – How to Use



*MICROPHONE SWITCH ON/OFF (Only included with SD Card Reader Option)*

The 100

Microphone On/Off Switch and Light



The 211

Microphone On/Off Switch and Light

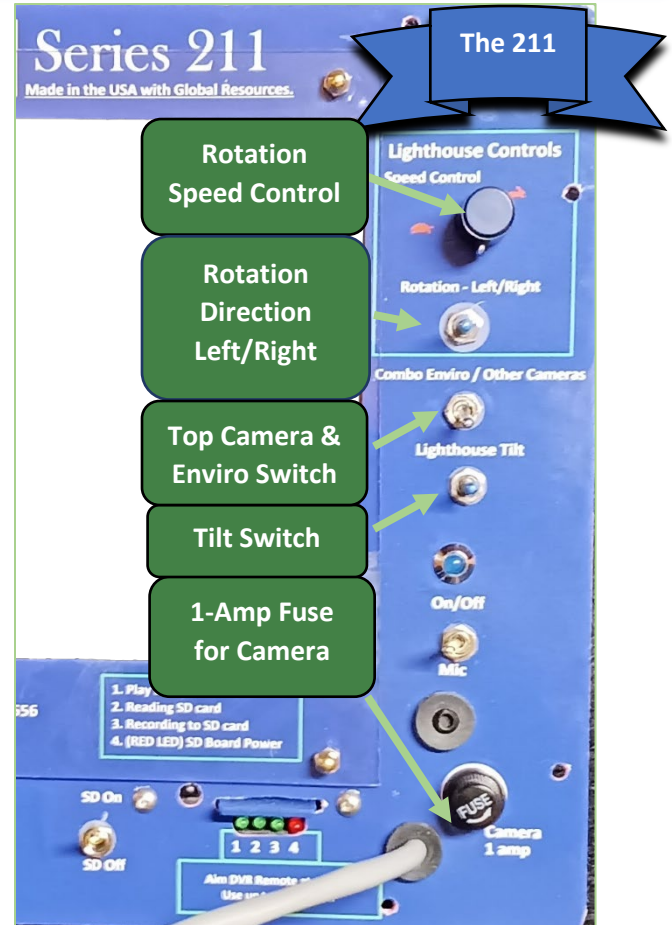
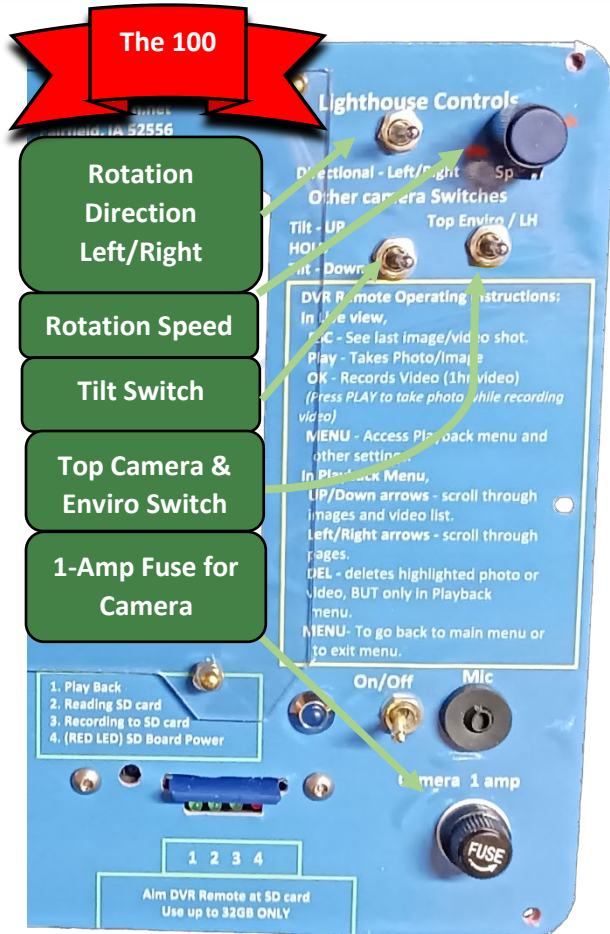


## Tip for using the Microphone.

The MIC (Microphone) for the 100 and 211 works best when you are about three feet away when speaking. If you plan on recording often, you may want to practice finding the right distance from you to the Mic.

If you record a commentary for your sales presentation to the customer, **be careful what you say (and careful of the background noise)** while recording. It's always a good idea to preview before presenting.

# Lighthouse Tilt™ & J3D Switches, Fuses, Date & Time



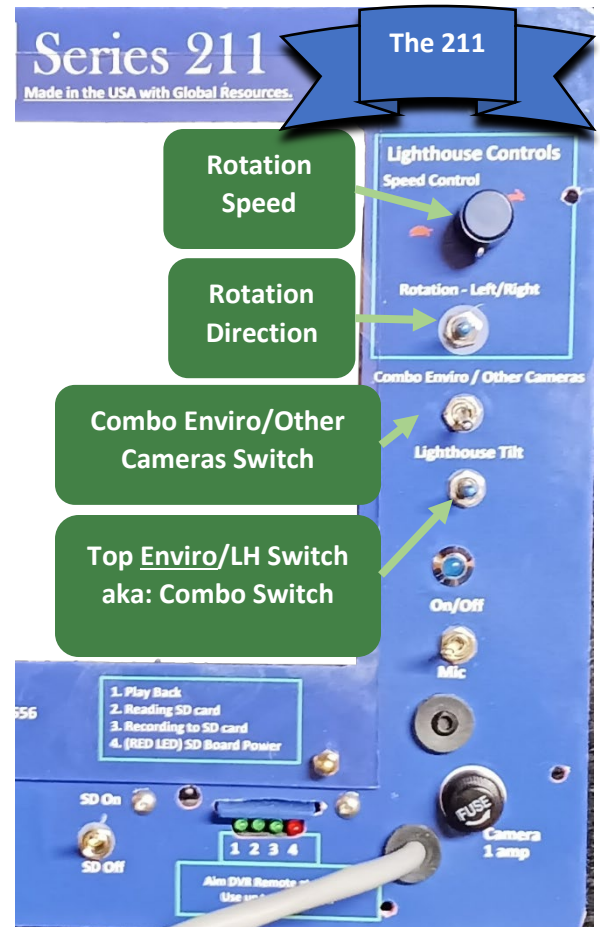
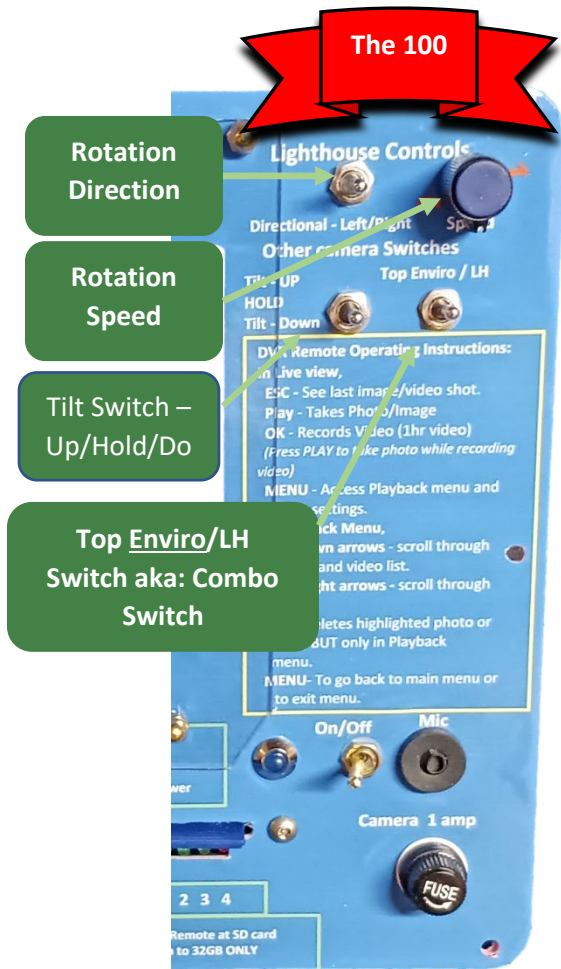
The Lighthouse™ switches control the Lighthouse™ Tilt and J3D Cameras and only these cameras.

The **Rotation direction** switches the camera's rotation to either left or right. When the switch is in the **center** or **stop** position, the camera remains still for recording images with the SD Recorder; this provides nice sharp images.

The **Rotation Speed** knob controls the speed at which the Lighthouse™ rotates. It only works on the Lighthouse™ camera. When it's in the '**On**' position when the camera is rotating (either left or right), it completes a full rotation in 11-27 seconds, depending on how you set the Rotation Speed Control Knob. You'll still be able to snap good photos. Usually, slower speeds create a better image. If not, stop the camera on the spot and snap the picture to obtain a JPEG image.

The **1-AMP fuse** is to protect the camera from interior or exterior shorts. If you all-of-a-sudden get a blue screen but have the **Date and Time** still displayed in the top right corner, check the 1-AMP fuse. If you replace it and still have a blue screen, **check your cable to camera connection. Check the Combo Switch if you have it. If you still have a blue screen, call 641-472-7643.**

# Lighthouse Tilt™/J3D, & Enviro – Switching between



In this section, we will add the Combo switch to the Lighthouse™ Tilt/J3E Switches. The **Lighthouse™ Tilt/J3D Switches** work the same way as they do on page 19.

The **Top Enviro/L.H.T. Switch** flips between video signals. The **Top Camera Switch** is for the Enviro (**top camera**) video feed, and **L.H.T. Switch** is for the Lighthouse™ Tilt/J3D video feed. There may be a 2-second delay when you flip the switch from one camera to the next, so don't panic. A bonus is that if you're recording a video with the built-in S.D. recorder (if you have the S.D. recorder), it keeps recording when you flip the switch, so you don't have to start a new video when you flip from the Enviro view to the Lighthouse™ Tilt/J3D view and vice versa.

The Lighthouse™ Switch and Tilt Switch have a middle toggle point so that you can stop rotation or tilt. Just remember, when flipping the switch and the camera stops moving, it is in the middle position. The camera is not broken.

# Why so many camera options?

**Why so many options?** It concerns the *amount of visibility within your scanning time frame.*

To provide a comparison, on a scale of 1-10, the Chim-Scan® Enviro/Cheesebit might score a five because you manually turn/twist the rods/camera for scanning. It is still a strong, sturdy camera with a long history with chimney sweeps.

The Lighthouse™ Tilt might score a 7. It turns on its own, saving you time versus manually turning the camera. However, it does not have a top camera for straight up/down views, so we give it a 7.

The J3D scores a 10. You can start your scan with a straight up/down view to determine if there are misaligned liners, blockages, or critters; it shows what you are getting into. Flip the switch, and the bottom camera provides a 360-degree angle. Flip the tilt switch up or down on the controller, and you have more viewing angles. **Twice the visual scanning in half the time.** This camera has become our most popular one because it packs all this into a body smaller than the old combo cameras.

In addition, optional wheels are available for the J3D, assisting in scanning offsets and rolling through thimbles.



SEEMORE SAYS "I LOVE THE J3D CAMERA! It provides 2Xs MORE AREA SEEN WITHIN THE CHIMNEY IN HALF THE TIME!"



# Chim-Scan® Enviro Camera in the Cheesebit



We custom make each LED light ring; slight variations may occur.

The Cheesebit has additional LED lights, to turn the light on and off simply push the switch on the back of the center hub.

Non-removable

Set Screw



The top of the bracket has a built-in whisker holder (older versions had a female Kwik-Lock fitting).

Cheesebit Bracket (Usually Red or Orange)

Extra LED lights (a 9V battery powers this) and LED Light Set

Cheesebit Center Hub (Usually Blue but can be a variety of colors)

Enviro Camera with 9 lights (this is removable by loosening the set screw on the bottom of the camera shown here. This allows the camera to go in 1.5" holes to scan Prefab Chases and other small spaces.)

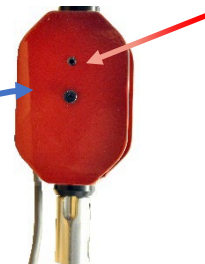
To adjust the camera angle, loosen the small set screw on the side of the bracket.

Once you have it at the angle you want, tighten the setscrew till it is taut against the center hub.

**DO NOT OVER TIGHTEN!**

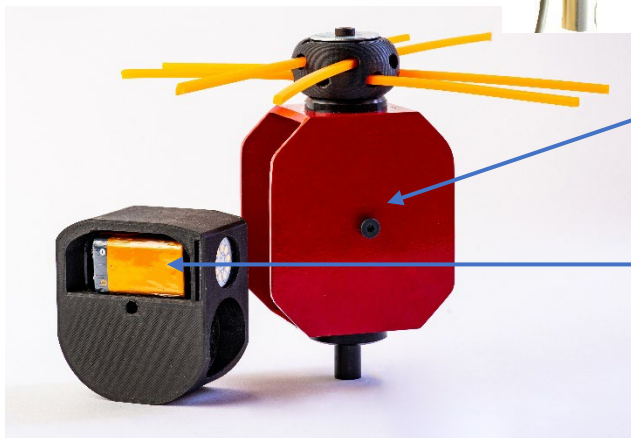
When it's time to change the 9V battery, loosen all the setscrews in the bracket and remove the center hub.

*When putting the hub back in the bracket, make sure you put the Battery towards the side with only 1 screw - shown here.*



Need a Mini-Whisker with Empire.

If you have something different or are unsure, send us pictures or a video of what you have.



**REMEMBER: ONLY Tighten Set screws till snug, DO NOT overtighten. Over tightening leads to future issues.**

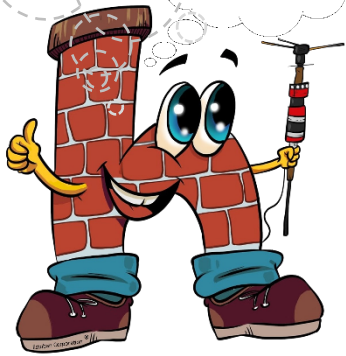


# Lighthouse™ Tilt Camera

Our Lighthouse™ Tilt Camera provides a 90° tilt range providing 10" inches of vertical view within a 7" x 7" liner. In a 12" x12" liner, the range is 16", over half the liner. The Lighthouse™ Lens can spin in a continuous 360° rotation, in either clockwise or counterclockwise rotations, without holding a button - making it hands-free.

This camera is great for looking up or down and at a mis-aligned liner or gaps in a joint.

Hi I'm SeeMore-Chimneys



Check out specifications on the next page.

View at 90°, or tilt 45° Up, or tilt 45° Down.



The Lighthouse Tilt Includes Mini-Whiskers



Upgrade options available

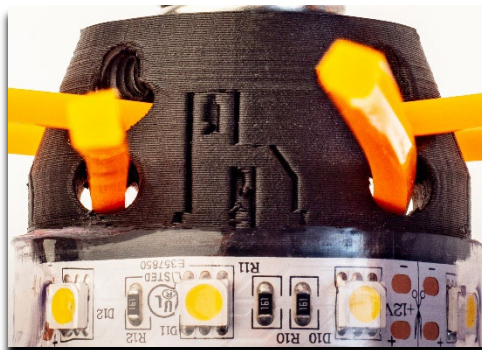


SCAN ME

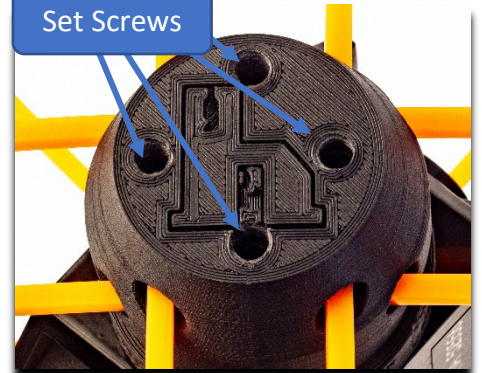
Easily change out the orange Mini-Whiskers to the White Whiskers for larger flues.



Easily Change Whiskers by loosening set screws with the supplied T-Wrench.



Set Screws



# Lighthouse™ Tilt & J3D Specifications and Operation

The Lighthouse™ Tilt and J3D Cameras feature the following benefits:

Description	Feature	Purpose
<b>Rotation Toggle Switch</b>	Left or Right Toggle	You control the direction & change it.
	Can rotate continuously	Saves time from manually turning rods.
	The lens does the rotation.	It prevents the power cable from twisting and becoming damaged.
<b>Lighthouse™ Tilt Switch</b>	Up/Hold/Down	*90° tilt range. Hold is in the middle of the toggle and stops where you want.
<b>Simultaneous Rotate &amp; Tilt</b>	Both rotation and tilt can run simultaneously,	Fast and smooth transitions. No need to stop and flip between toggle switches.
<b>Tilt Range</b>	90 ° tilt (45° up, 45° down)	10" inches of vertical view within a 7" x 7" liner and 16" for a 12" x12" liner
<b>Hold Setting in Tilt Toggle Switch</b>	45° Up/Hold Down	At 45°, you can easily view misaligned liners or disconnected stainless inner liner joints.
<b>Speed Control Knob for Lens</b>	Variable turn speed can be adjusted from a slow to a fast spin.	Larger flues, faster or slow down for smaller flues.
<b>Light Variation Knob</b>	You control the L.E.D. lighting	Brighten or dim the camera lights.
<b>Binary L.E.D. Lights</b>	Two rows of L.E.D. Lights wrap around the top and bottom of the lens.	Uniform image quality control with no L.E.D. hotspots and the removal of shadows that cause doubt.
<b>Compact camera size</b>	6"L X 2" W.	It easily fits through most dampers & thimbles.
<b>Compatible with 211 or 100 Controllers</b>	Two controllers to choose from.	211 has larger case & screen, 100 has smaller case & screen
<b>S.D. Recorder</b>	Toggle on to record to SD Card	Narrate the scan and use it to record pictures.
<b>Mic Switch &amp; Light</b>	Includes on/off Mic Toggle Switch and Light.	Toggle on to record; the Mic light also lets you know when you are recording.
<b>Rod Adaptor</b>	We can match the camera to adapt to the following rod styles.	ButtonLok, SnapLok, Viper, Euro-thread, 3/8" NPT and Torque-fit Adaptors..
<b>Whisker Centering Device</b>	Now included	Stabilizes and protects the camera.
<b>Lens protection</b>	Electrical Tape	At the top and bottom of the lens to prevent fine soot from reaching the camera.
<b>Extra Lens Cover</b>	Included with this camera	Have an extra on hand
<b>Lens Cover replacement</b>	Easy to replace lens cover – you can do it.	We provide information on changing the lens or sending it to us.

\*If you put the camera on hold at the highest tilt and then try to release the lens position, sometimes it will go down and cycle around to the middle hold position.

# Replacing the Lens Cover on the Lighthouse™ Tilt & J3D

Remove the electrical tape and loosen Set screws from the lens. Gently pull to separate.



Gently pull wiring connectors apart, separating the wires.



Set the top to the side, pull the lens off and replace it by sliding it over the camera.



Reattach the wiring connectors so they are secure.



Carefully tuck the wiring into the top of the lens in the cavity above the camera.



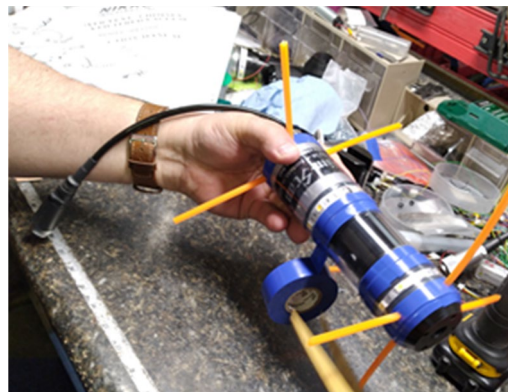
Slide the top of the Lighthouse on to the lens and secures with set screws - 3 short screws on top, 3 longer screws on bottom.



Tightly and neatly wrap electrical tape above and below where the lens casing meets the bottom of the camera. This keeps debris from entering inside the lens casing which protects the camera and wiring.



Make sure the electrical tape is secure and you are done!



Scan this QR Code to see Tom change the camera lens cover.

# The J3D Camera

The J3D Camera was custom designed in the Heartland and 3-D printed in our shop. Since we designed the parts, we ensured this camera is rugged, durable, and dependable. Use it to take images and videos at zero degrees (straight up/down), tilted 45 degrees up or down, or for 90-degree side views. The controls are built into the 211 and 100 controllers (see pages 18-22).

Since it is a one-piece camera, it is 6" shorter than the Lighthouse™ Combo Camera. *The top camera is not removable.*

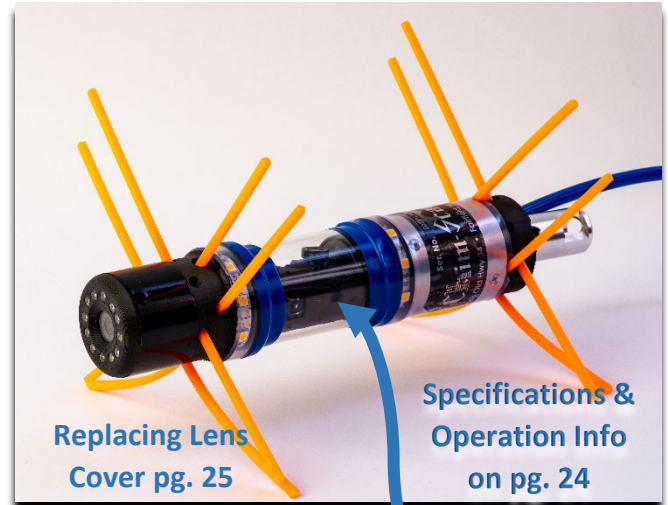
The **J3D Camera** merges the features of the Lighthouse™ Tilt and Enviro Camera into one tough, heavy-duty chimney camera. This new camera is great for smaller work areas and features a one-piece design. It features:

- Top Camera provides a straight up or down view.
- The lower Camera provides a joint or side wall view.
- The J3D has a 90° (45° up or down) tilt range with a 5" to 10" vertical view, depending on the liner's size.
- It Tilts continuously, can tilt and rotate simultaneously, or can stop at any the camera is still 2" round.
- Six inches shorter than the Lighthouse™ Combo Camera - great for small areas
- Lightweight yet durable
- A switch on the controller allows you to flip between views/cameras while scanning.
- If you're recording a video, the image will switch back and forth without stopping the recording.
- The camera includes two orange stabilizer sets for spacing & stabilization.
- Use the camera to scan masonry and prefab chimneys.
- It fits through a thimble\* and most dampers.
- They are designed and created in our lab in the Heartland.
- The camera includes a one-rod adaptor. **Customers must specify Kwik-Lock, Ro-Vac, SnapLok, or Torque Fit.**
- Wheels are an available option for the J3D Camera. These wheels aid in maneuvering offsets and scanning through thimbles!

*\*When scanning with the J3D Wheels, ensure the wheels are on the camera's TOP (or FRONT) side when traveling through the thimble and up the flue.*

***The top camera is non-removable. Use the Enviro Camera and Wired Gooseneck for accessing hard-to-reach areas like chases and attic areas. Flexible Gooseneck Rod and Enviro Camera \$750. Compatible with 211 or 100 Controller Units.***

**Top Camera for straight up/down, Bottom Camera Tilts 90° (45° up, 45° down).**



**Specifications & Operation Info on pg. 24**

**Replacing Lens Cover pg. 25**

point, and



**View at 0°, or tilt up to 45° Up, or tilt up to 45° Down.**



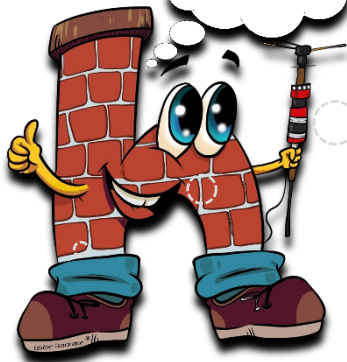
**J3D info**

# The J3D Camera

I LOVE the new built-in Top Camera and Whiskers!

"See more chimneys clearer and in half the time with a Combo style camera."

Hi I'm SeeMore-Chimneys



Professional Grade Chimney Scanning Imagery!



J3D shown with optional White Whisker Stabilizers



J3D shown with optional wheels



SCAN ME



COMBO TO THIMBLE

J3D is similar when scanning thimbles. If using wheels, ensure they are on the top (or front) of the camera.

Use the new J3D with the 100 or 211 Chim-Scan® Units!



When needing a small camera, for chases, ash pits, etc., order an Enviro Camera with a Flexible Gooseneck Rod for \$750. Compatible with 211 or 100 Controller Units.



J3D optional wheels are available for cameras manufactured in 2022 & 2023.

# How to Care for Your Chim-Scan® System

## Connecting Cables

Place the connector into the slot to align the pins, push them together, then turn the outer ring until tight. **Reminder – turn only the outer ring and not the connector.**

## Protecting Cables

It is important to handle the cable and cable connections carefully. The cables are one of the most frequently abused parts. It is important to keep them neatly on the reeler when not in use. Here is a tip for protecting your camera. **Keep the cable next to the rod in the same hand when passing the camera through a damper, thimble, or flue. Try not to twist the cable.**



## Cable Maintenance

One time a week, pull the cable out all the way until you see the tape, and wipe or clean it with a damp paper towel. Grab the cable and rewind it as it runs through your hand. This cleaning method should remove corrosive soot and prevent the outer casing from drying out. It also addresses nicks or peel-offs. (If you see a bare wire or a nick, **wrap it with three layers of electrical tape and keep an eye on it.**)

## On 211 Unit Maintenance

Don't quickly (speed wind) the cable up and jam the cable connector into the case. Slow up at the end to prevent jamming the connector and stretching the cable, which can cause damage.

## Special Considerations - Packing Up

Before packing your camera, here are some special care considerations:

Always use a cloth to wipe down your camera after cleaning the flue, especially if exposed to corrosive liquid or soot. Use a separate cloth to wipe down the monitor before packing up. Check the cable and wipe it down. While scanning, try not to put the unit where debris can fall into it and cause damage.

Place your rods back onto the caddy. Ensure the cable is reeled into the case until the connector is in the case. Also, check where your 120V cord is. You may forget to place it inside the case before closing the lid. **Make sure there's nothing on the reeler when you close the case.** Then close and lock the lid on the Chim-Scan® System.



## Stabilizers

USE stabilizers on the camera ALL THE TIME! Sometimes, the opening to view the chimney may only be a 2"x2" hole. This situation requires taking all the stabilizers off. Travel up the first flue slowly.

## Temperature Fluctuations

Your Chim-Scan® Camera and Controller should be cared for like any electronic system like a cell phone, computer, or iPad. When the unit hits 32°F, it has to warm up to function properly. The best location is in the passenger seat or behind the front seat. On the opposite end of the temperature spectrum in the 100° area, problems can also arise.

## Keyboard Care

Blow out the keyboard with compressed air to remove debris that may fall into it. Don't set anything on top of the keyboard. If you want a replacement keyboard, we stock them, or you can use any USB Keyboard other than Blue Tooth. If you want to add a keyboard, we need your controller back to make these changes.

# Battery Operation for Your Chim-Scan® Unit

## The Battery Adaptor

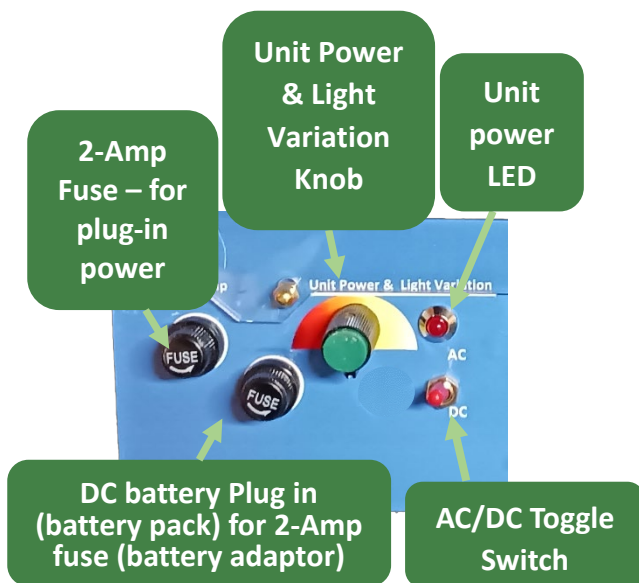
The new Chim-Scan® Battery Attachment can be used for respective companies as mentioned below in our chart. It attaches to the exterior of the Chim-Scan® Camera Case. The battery slides into the adaptor so you can use the standard batteries for your power tools. Power up your Chim-Scan® Controller to turn the unit on as usual.

A 2V Fuse is included. If you experience a no-power situation, check the fuse. Our experience with continuously using a new battery is 5-8 hours per charge. To convert your current Chim-Scan® Controller, complete our repair form estimate online or call us for pricing.

*Never use a battery brand other than the one that your controller is set up for.*



Description	Battery Size
DeWalt®	20V
Milwaukee®	18V
Bosch®	18V
Rigid®	18V
Makita®	18V
Kobalt®	24V



Make Sure to flip the toggle switch to DC when using the battery option.

# Keyboard Commands

**Basic Operation:** A flashing underscore cursor will appear in the current position on the screen. To move the cursor, use these commands (up, down, left, and right arrows). The text will wrap left to right, top to bottom. The cursor will disappear after approximately 10 seconds if no key is pressed. The letters and numbers on the keyboard can be typed directly into the screen like a normal keyboard. The text is white.

When using the SHIFT↑, CTRL, or A.L.T. keys in conjunction with the alphabetic or the function keys, the control key must be pressed first and held; then, the required alphabetic or function key must be pressed and released before the control key is released. When finished, press the E.S.C. key or wait until the cursor times out and start typing again.

Backspace removes a character from the screen. The DEL key has no function: the HOME and E.N.D. Keys move the cursor position to the left and right of the current line on the screen. The RETURN key moves the cursor to the beginning of the next row of text.

**Screen Setting Control:** To move between screen pages (up to 12), use the PAGE ↑ to move to page 1 and PAGE ↓ to move towards page 8, or use the F10 Command in the chart on the next page. To clear the screen of text, press SHIFT+F9. Check the chart on the next page for specifics.

**Outlining:** Areas of the screen can be outlined on the screen. These are stored on each page until deleted. The central area of the screen can be outlined using the SHIFT+F12 command, which places a cross-hair in the approximate center of the screen. Additionally, specific areas can be manually outlined using the outline characters accessed using the CTRL and character keys, as shown in the chart on the following page.

**Time & Date:** To set the time and date, press SHIFT+F4. The seconds will flash. Press the LEFT ARROW to cycle through the time and date elements. To increment the element selected, press the UP ARROW key. To leave the time set mode, press Return. The time display area could be changed – it overwrites anything you put into that space with the keyboard. The clock can be displayed with the counter on a single line at the top or bottom of the screen. Press SHIFT+F5 to alternate between these positions. You can hide the clock by pressing CTRL+F4, and displayed while hidden, press F4. Press ALT+F4 to toggle the clock and counter background on and off. This background setting does not affect the background setting for the typed text.

## Counter:

The counter measures increments/decrements by 1 between +99999 and -99999. The position of the point in the count display can be changed to one of five positions by pressing ALT+F6. The position of the decimal point does not change the count's value or the prescale content value. The counter may turn in a counterclockwise rotation. This is a positive count. If the counter turns in a clockwise rotation, it is a negative count.

## Counter Prescaler:

A prescale constant between 1 and 2048 can be set to adjust the counter display to match the external count source. To set the prescaler first, press F10. This puts the unit into prescale setting mode. The count displayed will be replaced on the screen by the flashing prescale constant preceded by a colon : to indicate this is the prescale constant. The RIGHT cursor key increments the prescale constant by 1. The UP cursor key increments the prescale constant by 10. The LEFT cursor key increments the prescale constant by 100. The DOWN cursor key resets the prescale constant to .0001. Pressing RETURN leaves the prescale setting mode and stores the changed value in EEPROM. Pressing E.S.C. leaves the prescale setting mode without storing any changes.

Please note that the counter is not a direct distance measurement. You will need to know the counts per turn and turns per unit of distance measurement given by the encoder used to set the prescale to read the display. The counter value is preserved when power is removed from the unit.

## Reset Preset:

To reset the count to a specific non-zero value, press SHIFTF10. The rightmost digit of the counter will flash, indicating that it is the selected digit in this mode. The value shown will always be the current value of the counter, not the reset preset value set previously. Therefore, if you want to make a minor change, reset the counter with F6 before you enter the reset preset edit mode.

Pressing the UP and DOWN cursor arrows allows the selected digit to be increased or decreased between 0 and 9. Pressing the RIGHT and LEFT cursor arrows moves the selection of the counter digit, either left or right, so all the digits can be set as required. Pressing the – key toggles the state of the counter sign either positive or negative. Pressing the 0 key sets the reset preset to zero.

E.S.C. leaves the preset reset mode, making no change to the counter value, the existing reset preset value, or the existing reset preset value. If no key is pressed for approximately 20 seconds, the preset reset mode is left automatically.

If a non-zero reset preset is used, there is no way to zero the counter without entering the reset preset mode described above.

The most common commands are highlighted below.

<b>Keyboard Commands</b>	
↑	Moves cursor up
↓	Moves cursor down
←	Moves cursor left
→	Moves cursor right
BACKSPACE	Removes character from screen to the left of the cursor
DEL	Has no function.
HOME	Moves cursor left of the current line.
E.N.D.	Moves cursor right of the current line.
RETURN	Moves cursor down one line.
<b>Specific Control Commands – Background, blink attribute, and display mode</b>	
CTRL+F1	Free cursor to full display extents
ALT+F1	Lock cursor to visible display extents
SHIFT+F1	Turn the background setting on/off.
CTRL+F2	Turn the invert setting off.
ALT+F2	Turn the invert setting on.
SHIFT+F2	Turn the blink setting on/off.
ALT+F3	Auto-select text over external/internal video
SHIFT+F3	Select text over the internal video signal.
<b>Time &amp; Date</b>	
SHIFT+F4	To set a time & date
F4	Show the clock display.
ALT+F4	Toggle the background of the time, date, and counter.
CTRL+F4	Hide the clock display.
RETURN	Exit time set mode
LEFT ARROW	Select a time or date element.
UP ARROW	Increases digit
DOWN ARROW	Decreases digit
SHIFT F5	Alternates clock between the top and bottom of the screen
<b>Screen Setting Controls</b>	
CTRL+F7	Shift display down
ALT+F7	Shift display up

<b>Keyboard Commands Continued</b>	
SHIFT+F7	Shift display left or right
SHIFT+F8	Reset display X - Y position
SHIFT+F9	Clear the screen
CTRL+F10	Page down
ALT+F10	Page up
SHIFT+F10	Enter preset mode
SHIFT+F10	Enter prescale mode
CTRL+F11	Character white level 1 (darkest)
ALT+F11	Character white level 2
SHIFT+F11	Character white level 3 or level 4 (brightest)
SHIFT+F12	Outline Screen (puts a border around the screen)
E.S.C.	Clears SHIFT↑, CTRL, A.L.T., and CAPS settings
<b>Outline areas of the screen.</b>	
CTRL+A	Top left corner
CTRL+B	Top right corner
CTRL+C	Bottom left corner
CTRL+D	Bottom right corner
CTRL+E	Top outline
CTRL+F	Bottom outline
CTRL+G	Left outline
CTRL+H	Right outline
CTRL+I	Mid left
CTRL+J	Mid right
CTRL+K	Mid-top
CTRL+L	Mid bottom
CTRL+M	Mid vertical line
CTRL+N	Mid horizontal line
CTRL+O	Full cross
CTRL+P	Left cross hair
CTRL+Q	Center cross hair
CTRL+R	Right cross hair
CTRL+S	Box
CTRL+T	Top left outline
CTRL+Z	Top right outline
CTRL+V	Bottom left outline
CTRL+W	Bottom right outline
<b>Counter Command Controls</b>	
ALT+F6	Change decimal point position: 0000.0, 000.00, 0.0000, 00000
CTRL+F6	Hides the Counter Display
SHIFT+F6	Resets the counter to the preset value
F6	Shows the counter display
<b>Counter Prescaler</b>	
F10	Enter prescale set mode
RETURN	Exit prescale set mode and save changes.
E.S.C.	Exit prescale set mode and discard changes.
RIGHT ARROW	Increment prescale value by 1
UP ARROW	Increment prescale value by 10
LEFT ARROW	Increment prescale value by 100
DOWN ARROW	Reset prescale value to 0001

## Keyboard Commands Continued

### Reset Preset Commands

F10	Enter reset preset mode
RETURN	Exit reset preset mode and save changes
E.S.C.	Exit reset preset mode and discard changes
RIGHT ARROW	Move the digit selection to the right.
LEFT ARROW	Move the digit selection to the left.
UP ARROW	Increment selected digit by 1 up to 9
DOWN ARROW	Decrement selected digit by 1 down to 0
MINUS KEY -	Toggle counter sign + positive or - negative
ZERO KEY 0	Set reset preset value to positive zero.

## How to Use the SD Recorder and Remote

### You must have the remote to take Photos or Video

If you've lost the remote call 641-472-7643 to order a replacement for \$14.95

- ◆ Press OK to start recording a video.
- ◆ Press STOP to stop recording.
- ◆ Press PLAY to take a photo. To take a photo *while recording the video*, **press PLAY.**
- ◆ Press ESC to see the last photo or video taken.
- ◆ Press DEL. to delete the photo or video.
- ◆ Press ESC again to exit PLAYBACK or when viewing PHOTOS/VIDEOS to enter Playback Menu.
- ◆ Press Menu to return to Live Feed in Playback menu.
- ◆ Press Menu when viewing Live Feed to view Menu Options and Playback menu.
- ◆ We pre-set all settings for optimum viewing and recording.
- ◆ In Playback Menu,
- ◆ Use the Up/Down Arrows to navigate the page.
- ◆ Use Left/Right Arrow to move forward or back pages.
- ◆ To view and Photo or Video in the playback menu, press OK.



### What does Live Feed Mean?

It means you're viewing what camera is seeing right then.

## SD Card Insert & Retrieval



Insert SD Card pushing gently until it clicks. Don't push too hard, or this cardholder could break.

Once the card is in the SD Recorder, you are ready to record. First, take a test picture to ensure the card is firmly seated.

When you are ready to review your pictures, gently push the card in, and it springs back out.

## How to capture your images of video

When you press PLAY to take a photo, you see a quick glitch in the screen - you may see 12 secs, then it turns to 14 secs.

You CAN'T capture photos while you're recording a video unless you have a unit with a new chip (as of August 2021.)



This is the screen view when you're recording a video.

Press OK to record the video.

The SD recorder records for 1 hour then stop.

To stop the recording at any time, press STOP.

**Take a photo or video of your work order to ensure the SD card is working and recording. Also, verify that the date and time setting is correct.**

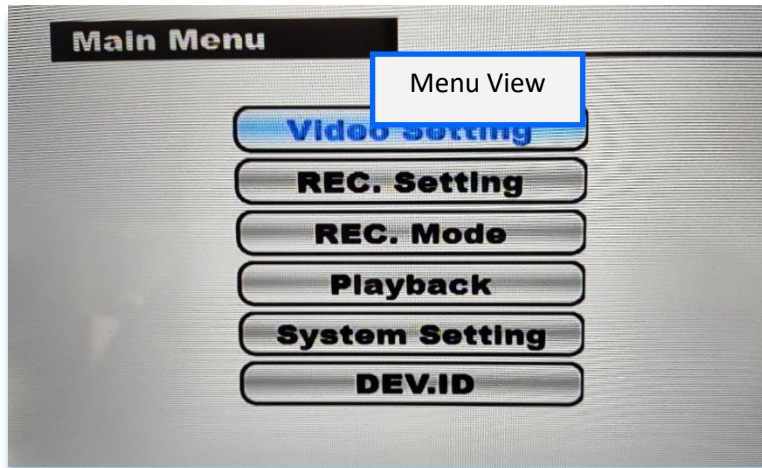


# How to preview your images

To view photos and video, there are two options.

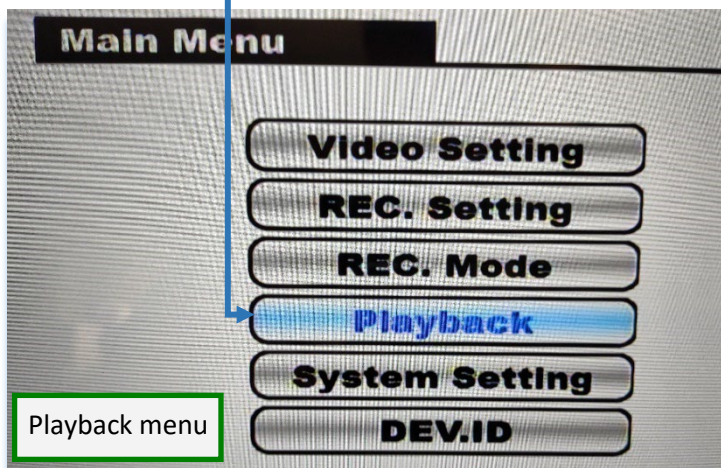
Option 1:

- Press **MENU** and it will provide you the **MENU View** below.



2. Use **DOWN ARROW** to move to the **PLAYBACK** option.

3. Press **OK**, and now you are in the **PLAYBACK MENU**.



# How to preview your images, continued

## Inside the PLAYBACK MENU

1. Use **UP/DOWN ARROWS** on the Remote to scroll through the folders of PHOTOS/VIDEOS. Folders are highlighted by the red box and are created by date.

To view a PHOTO/VIDEO in a folder, press **OK**.

1. Press **OK** to go to the PHOTO/VIDEO Page. Once inside the folder, you see a list of PHOTOS/VIDEOS.

2. Each page of this folder holds 8 PHOTO/VIDEOS. To view PHOTO or VIDEO, select by moving the red box using the UP/DOWN arrows on the remote and press **OK** or **REMOTE**. To exit from viewing press **ESC**.

A. To Scroll through pages, use **UP/DOWN ARROWS**.

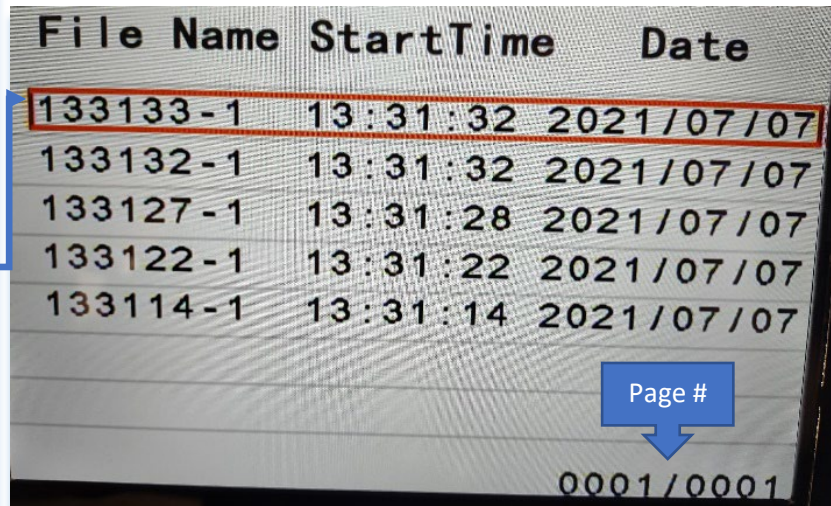
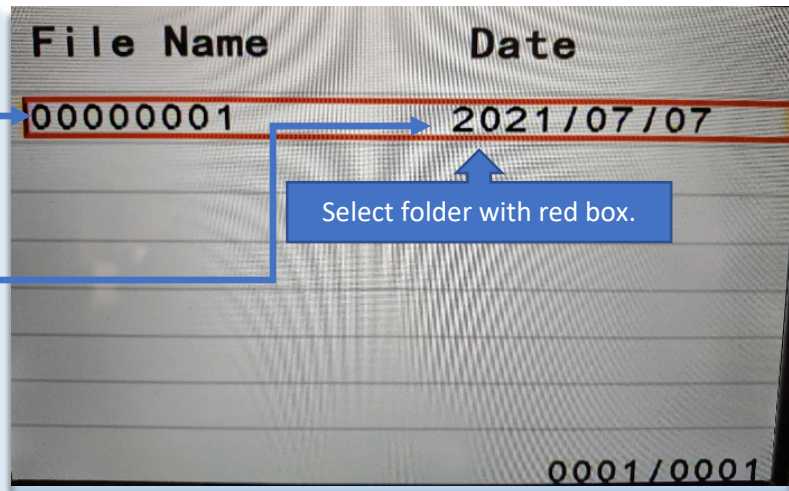
5. To EXIT PLAYBACK MENU - Press **ESC** or **MENU**.

A. **ESC** will take you to back to MENU.

B. **MENU** will take you back to LIVE FEED.

Your photo, at right, will include the File Name, Start Time and Date Stamp.

The red arrow indicates this is a video.



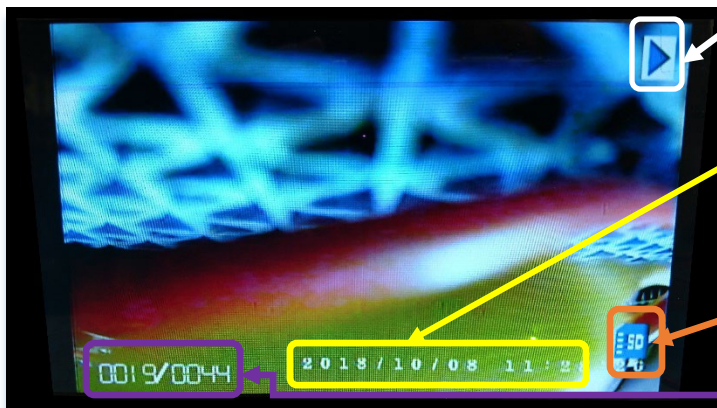
## How to preview your images or videos, continued

Option 2:

1. While viewing LIVE FEED—  
Press **ESC**.
2. This will take you to THE  
last PHOTO/VIDEO taken.
3. To return to LIVE FEED -  
Press **ESC**, then **MENU**.  
A. When you press  
**ESC** it takes you to the  
PLAYBACK MENU.



## How to tell if you are looking at a images or video.



PLAY ICON signifies that the recorder is in PLAYBACK MODE.

DATE and TIME of photo

SD ICON

Number of the PHOTO

VIDEOS shows the same things as still PHOTOS but with the addition of *VIDEO LENGTH*.

PLAY ICON' in VIDEO MODE means PLAY - It turns into a pause symbol when the video is playing.



## How to Delete Images/Videos

You can only DELETE PHOTOS/VIDEOS when you're viewing them.

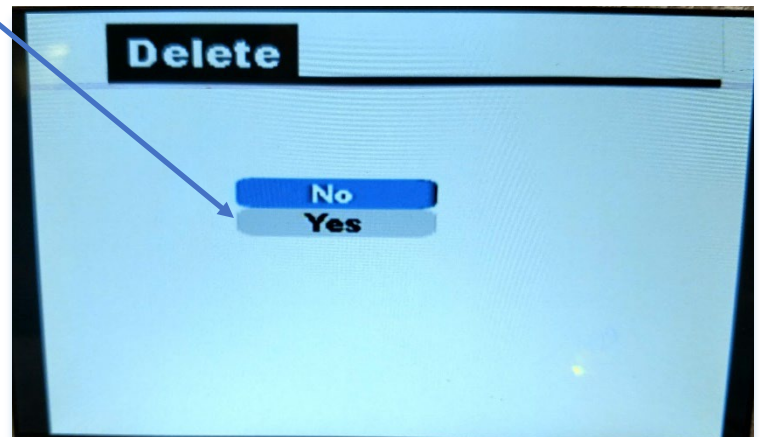
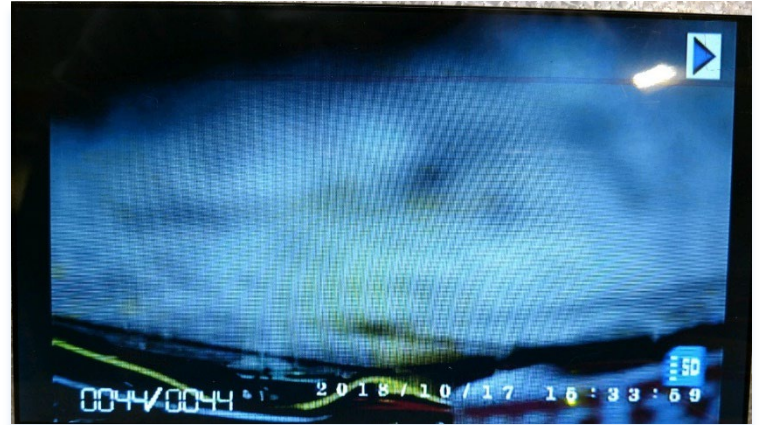
To DELETE PHOTOS/VIDEOS:

- 1 Go into PLAYBACKK MENU.
2. Press **OK** to select the PHOTO/VIDEO you wish to delete.
3. Press DEL.
4. Use **DOWN ARROW** to highlight YES.
5. Press **OK** to DELETE photo.

If you need to DELETE MULTIPLE PHOTOS

Option 1 - Take the card out of the Chim-Scan®, put it into a computer, copy photos/videos to a folder, then delete.

Option 2 - Use the above procedure to delete photos/videos one at a time while keeping the card in the Chim-Scan®.

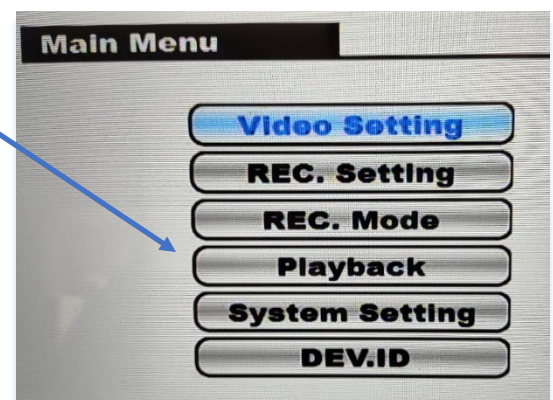


## Navigating SD Recorder Menu (as of 8.1.2021)

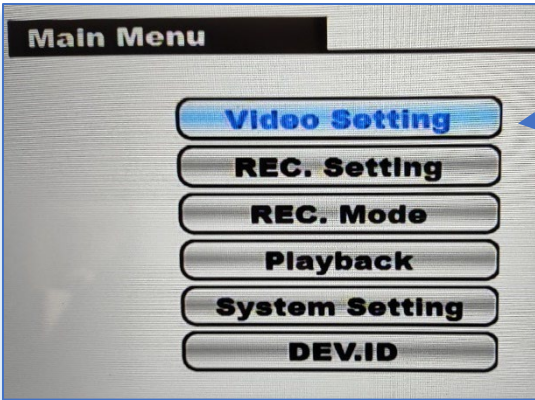
When you press the **MENU** button, it presents 5 options.

The 4th option, **PLAYBACK**, is the most used of all the options.

We have preset all other options to their very best setting, so there are no need to 'fix' or 'Check' settings. But for those who want to know every inch of the menu options, **READ** the following sections and pages, so you know what each one does and where they should be set.

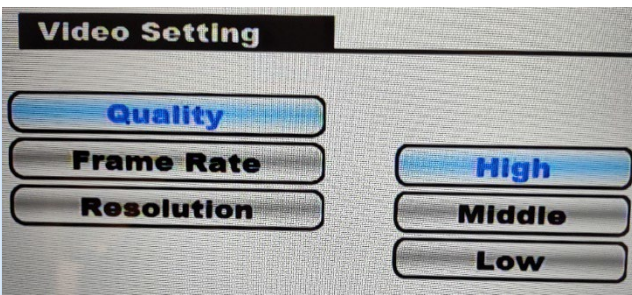


# Section 1 – Image Setting

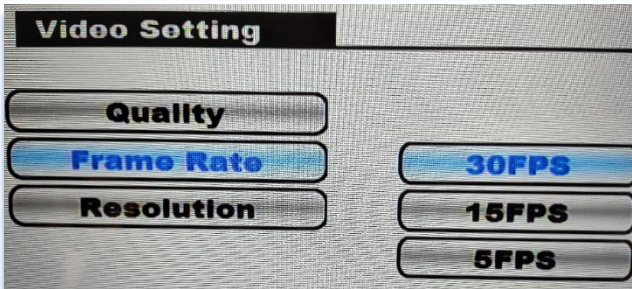


When you select the VIDEO SETTING MENU option, it has three sections:

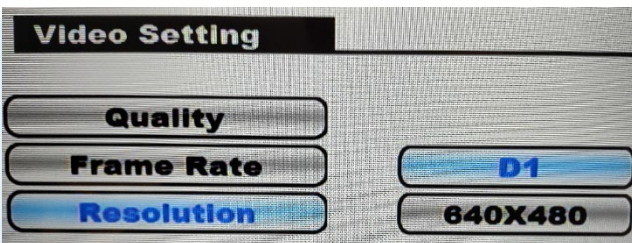
- QUALITY
- RAME RATE
- RESOLUTION.



QUALITY is set to HIGH.

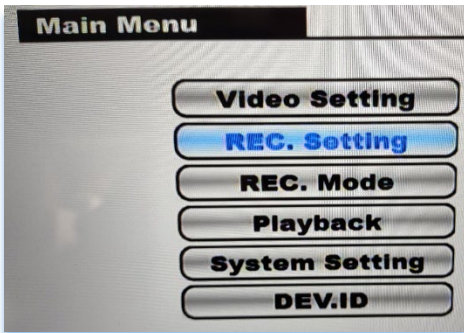


We have set the FRAME RATE to 30FPS.



We have set the RESOLUTION to D1. These are the best settings; feel free to adjust them, but there isn't a need.

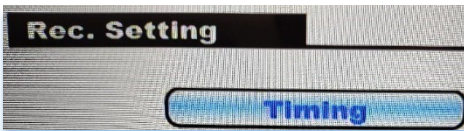
## Section 2 – REC (record)



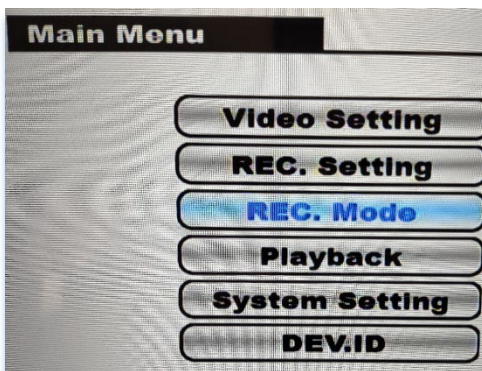
The REC SETTING menu option is to *schedule when the SD Recorder should start recording the video.*

This MENU is useless when scanning chimneys. Please leave it in this position.

The Timing SETTING tells the recorder how long to keep recording. We set it for an hour, but you could press OK, and it will give you the option to record for five minutes or more.



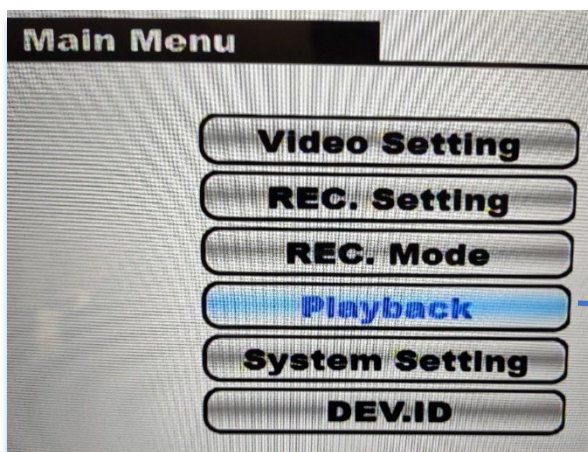
## Section 3 – REC. Mode



The REC MODE - gives you the option to set when the SD Recorder starts recording video. We have it set to **MANUAL** as this allows you to start/stop recording video when you want and allows you to take PHOTOS without interruption.

Please leave it in this position.

## Section 4 – Playback

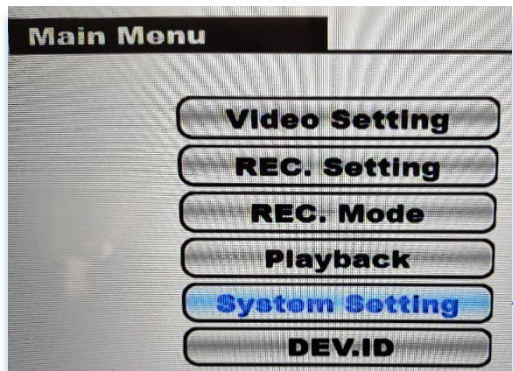


The **PLAYBACK** option is where you access the photos or videos you've taken.

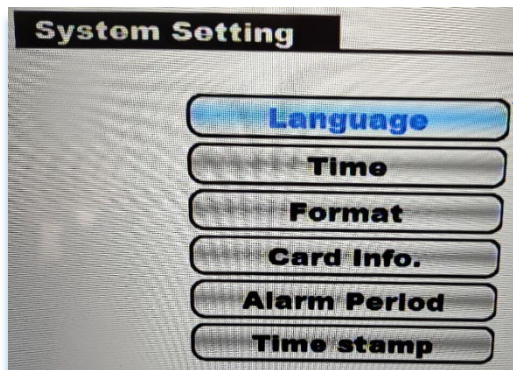
*How to preview images or videos you've taken (Page 35-37) explains this feature.*

File Name	StartTime	Date
133133-1	13:31:32	2021/07/07
133132-1	13:31:32	2021/07/07
133127-1	13:31:28	2021/07/07
133122-1	13:31:22	2021/07/07
133114-1	13:31:14	2021/07/07

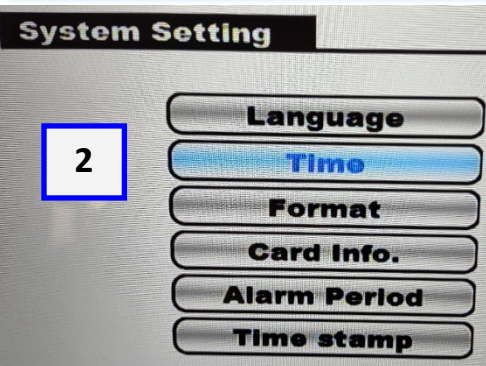
# Navigating Recorder: Section 1 – System Setting



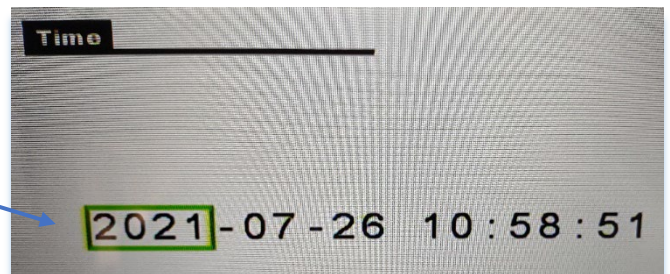
System setting has 6 options:



1. Language - English or Chinese



2. Time - Which is where you set date and time for timestamp.

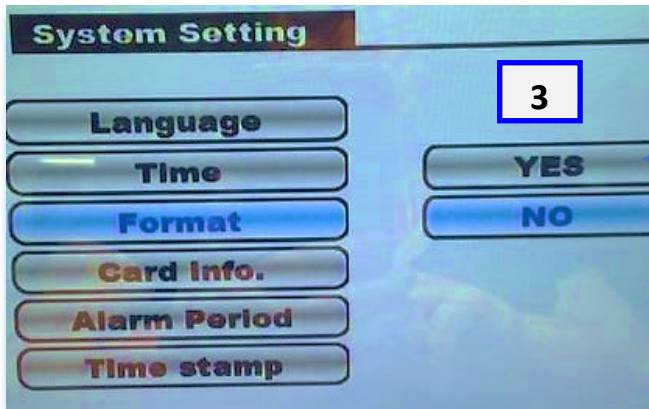


## To Set Date and Time:

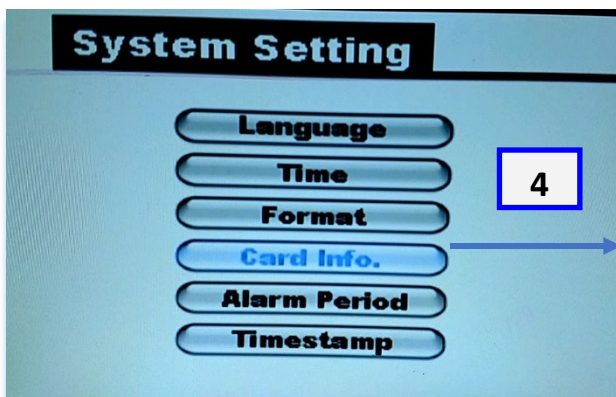
1. Press **MENU**.
2. Scroll down to **SYSTEM SETTING** - Press **OK**.
3. Scroll down to **TIME** - Press **OK**.
4. Use **UP/DOWN** to change numbers and **LEFT/RIGHT** arrows to move place set.

Example: **DOWN** to change 2020 to 2021 and **RIGHT** to move to 07.

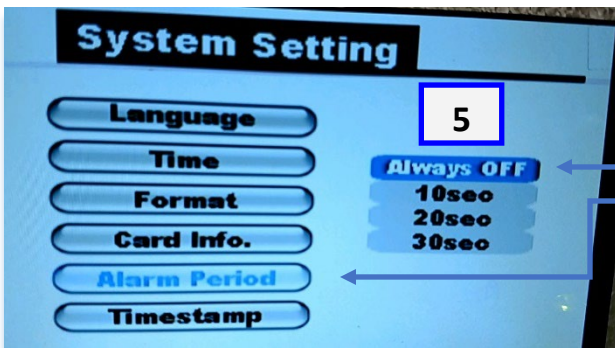
# Navigating Recorder: Section 1 – System Settings, Cont.



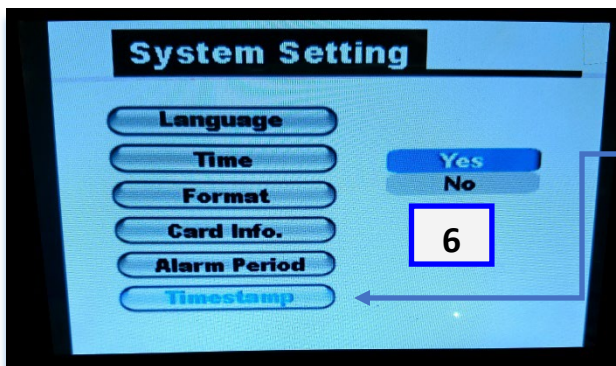
3. Format - to format SD Card, highlight YES and Click.



4. CARD INFO: This lets you see the total size of the SD Card you are using. Percentage of memory being used and percentage of memory left.

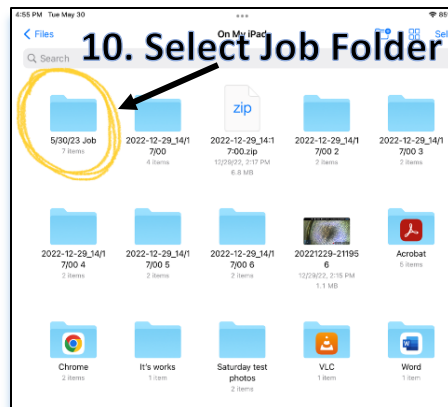
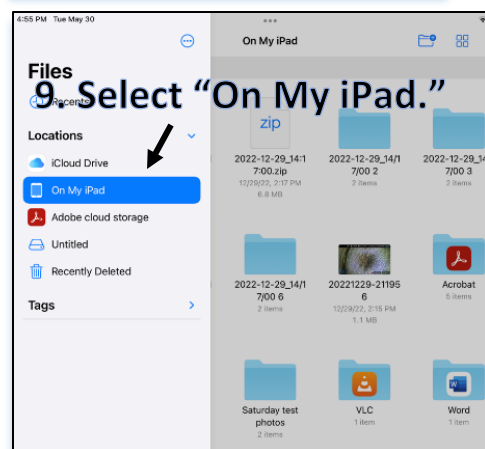
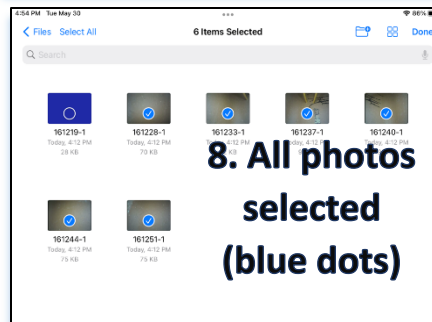
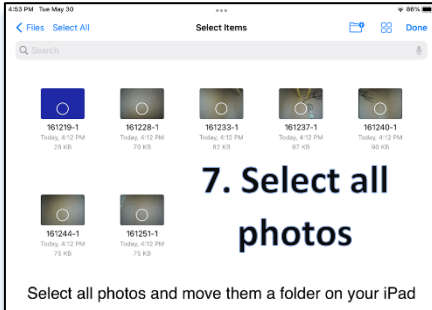
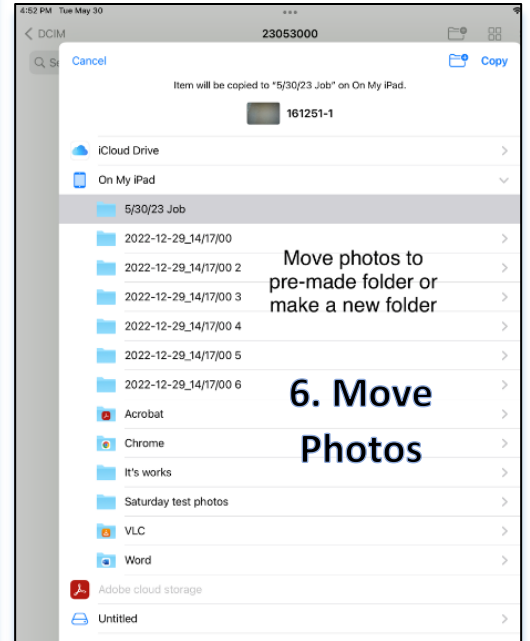
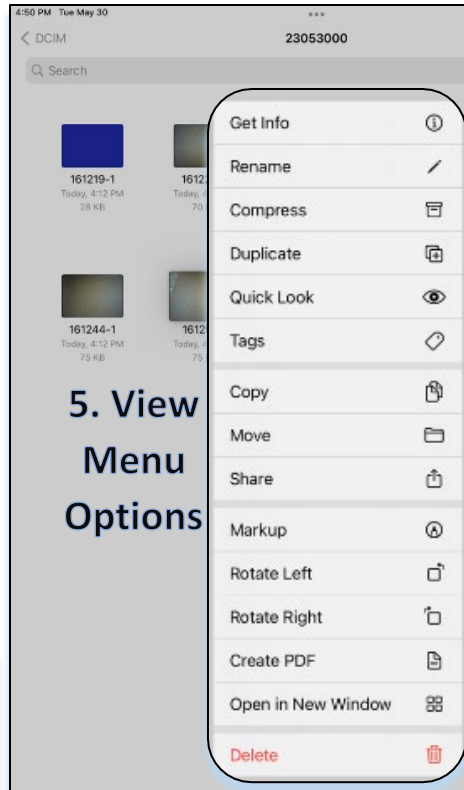
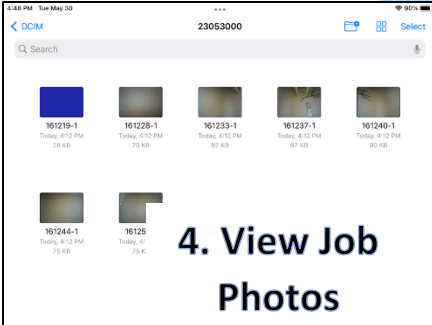
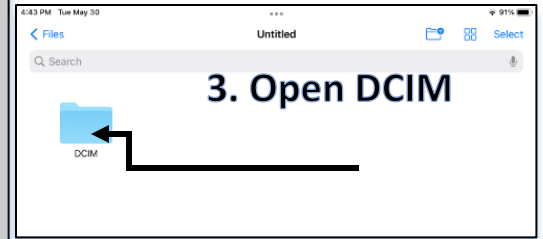
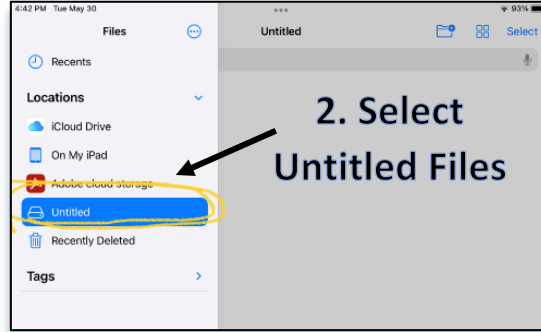
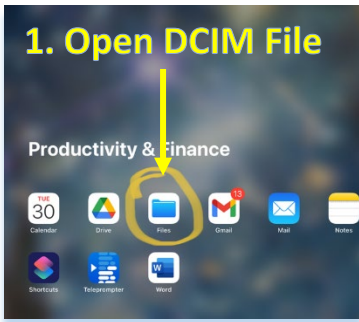


5. ALARM PERIOD: Ignore this setting, it should always be set to OFF.

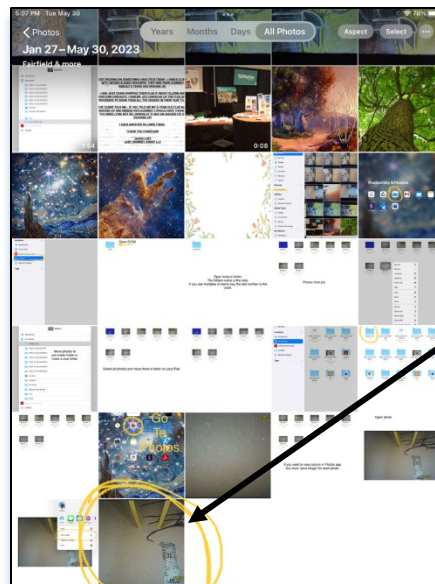
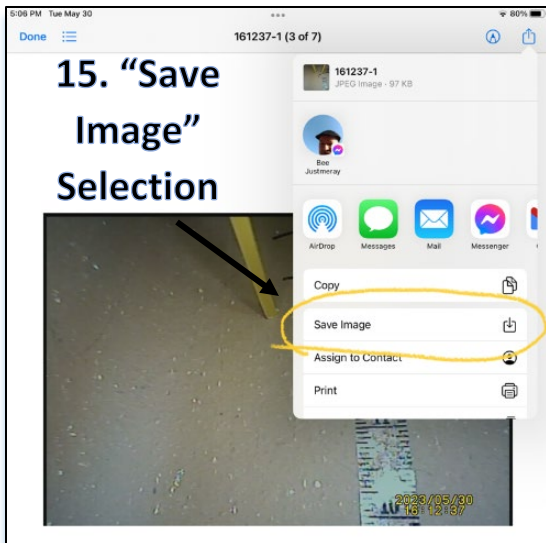
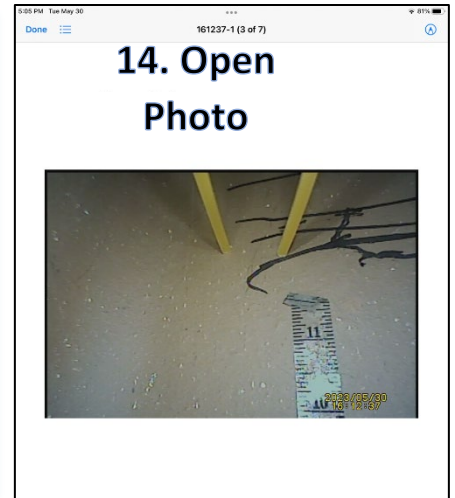
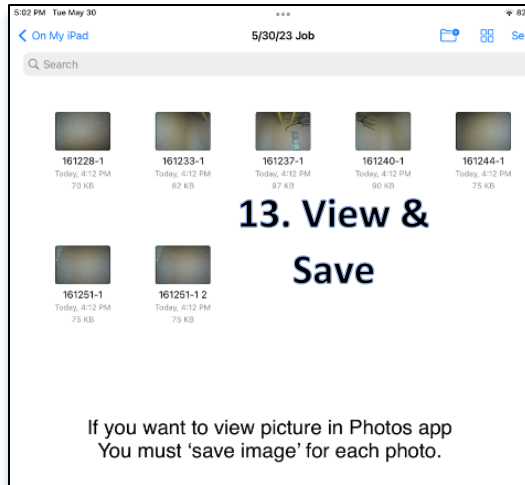


6. TIMESTAMP - still allows you to turn the Time Stamp on/off.

# Transferring photos to an iPad via an SD Adapter



# Transferring photos to an iPad via an SD Adapter, Cont.



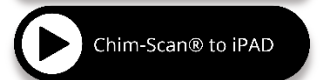
16. The Saved Picture

Scan me to watch a "How To" Video

iPad

iPad Adaptor

SD Card



# Optional Add-On's and Replacement Parts

## NEW BATTERY ADAPTER FOR DEWALT®, BOSCH®, MAKITA®, RIGID® AND MILWAUKEE® (ALSO SHOWN ON UNIT) – PART #22BATTERY DRILL ADAPTOR \$120

Upgrade your 100, 211, or another unit to use the following battery packs so you can use one battery for all power tools!

Description	Battery Size
DeWalt®	20V
Milwaukee®	18V
Bosch®	18V
Rigid®	18V
Makita®	18V
Kobalt®	24V



MILWAUKEE



DEWALT

## USB KEYBOARD – Part 202511

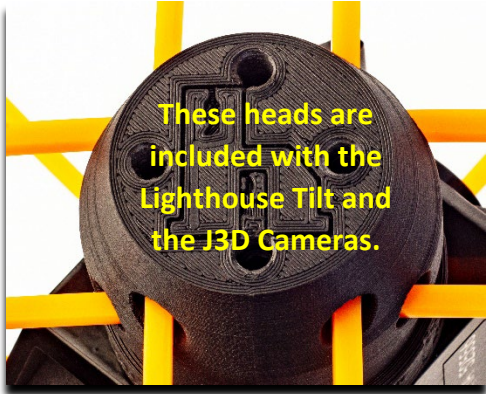
The keyboard provides the ability to put text on the screen and to have the client's name on each photo; even on your JPEGs or video, the transfer is automatic. The cost is for installing an internal board. We use a mini keyboard that fits in either case, and any corded USB keyboard works best. If you have a keyboard that fails in the field or is too small for your fingers, you can use any USB keyboard except for Bluetooth, which won't work. Keep in mind that a locally purchased keyboard may not fit in the case.

The reason for the cost is it includes the internal components that have to be installed into the Chim-Scan Controller Unit before you can use a Keyboard and the Keyboard.

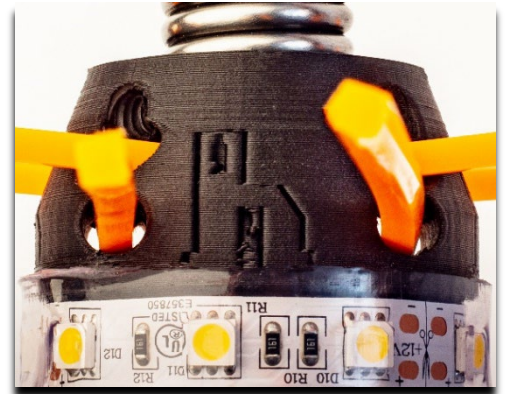
These can be added on most units, the unit has to come back so we can install the internal components. It is compatible with a standard USB keyboard, so if you wish to use a bigger keyboard you can!



## Optional Add-On's - Stabilizers



Stabilizers are now built into the tops of all cameras built after January 2022. They can be easily adjusted with an Allen Wrench and replaced (examples to the left and right).



**MINI-WHISKER, Product # 202400-mini** (For use with cameras constructed before 8.1.21).

The Mini-Whisker is designed to keep the camera centered in the chimney and off the walls. This hub works with any Chim-Scan camera that has a female Kwik-Lock.

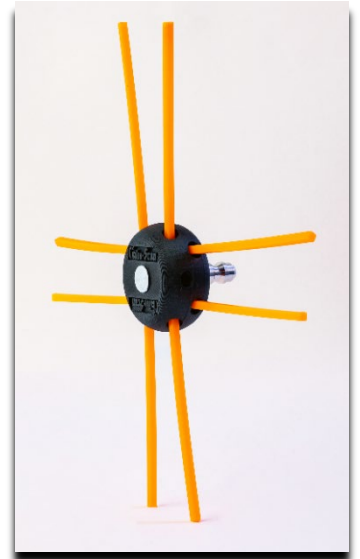
Cameras built from 2021 forward have built-in stabilizers and do not need this stabilizer.

**WHITE WHISKER STABILIZER product # 200 White Whisker**

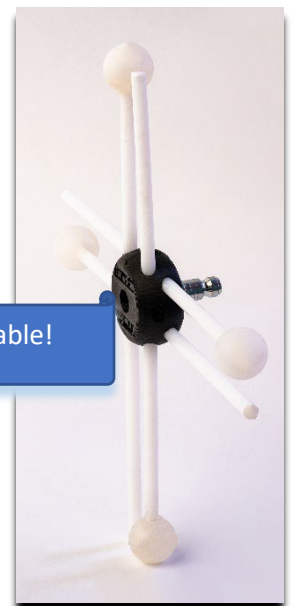
This Whisker is the original stabilizer. It keeps the camera centered in masonry flues but can also do prefabs/metal chimneys. Works best in these flue sizes: 8" x8" up to 13" x13".

Replacement whiskers, whether orange or white, are available. When ordering, please order in sets of four. White Whiskers are available in custom sizes. Orange whiskers are unavailable in larger sizes since they become ineffective because of their flexibility.

The whiskers can form a slight memory. To reverse this memory, put the whiskers into the caddy upside down, wait 10-30 seconds and pull back out or if the camera is in a tote bag, simply hold the whiskers for 10-15 seconds in the opposite direction of the bend. This should straighten them out.



This stabilizer is for cameras with a Kwik Lock Fitting on the camera top.



Custom Sizes Available!

# Optional Add-On's - Rod Adaptors

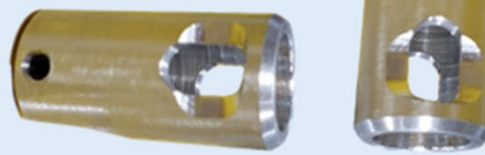
## Rod Adaptors

Below are the most common rod adaptors we make.  
Scan the QR Code below for a video that shows all 6 that we have available.

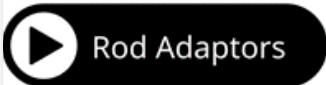
Kwik-Lock  
Product # 202500-KL



Rovac/ButtonLok Adaptor  
Product # 202500-R



10 mm Thread Viper Adapter  
Product # 202500-V



This video shows you the other rod adaptors we make and how to take them on and off the camera.

The 1/8" T-Wrench is universal. *It's included with each camera. Use it to remove rod adaptors, remove or adjust whiskers and to remove the Enviro or Chim-Scan® Enviro Camera from the Cheesebit Bracket.*



**REMEMBER: ONLY Tighten Set screws till snug, DO NOT overtighten. Overtightening leads to issues in the future.**

# Optional Add-On's - Rods

## Progressive Rod Kit, aka Pro-Kit product # 202016P, Includes:

- 9 - 7/8" Gray
- 2 - 5/8" Nylon
- 1 - 1/2" Nylon - Starter Rod

The 30 feet of rod fit inside the 6-inch round caddy for easy carrying and organization. Each rod is 30" long.

## Thimble Rod Product # 202016K-6

- 6 - 7/8" Gray Rods
- 8 - 5/8" Nylon Rods
- 2 - 1/2" Nylon - Starter Rods

The 40 feet of rod fits inside the 6-inch round caddy for easy carrying and organization. Each rod is 30" long.



Assortment of White Nylon and Grey Rods shown in rod caddy (sold separately). *This picture is an example only.*

## Kwik-Lock Rods - Sold individually.

1/2" Diameter 2.5 Feet Long White Starter Rod  
Product # 202030

5/8" Diameter 2.5 Feet Long Rod Product # 202031

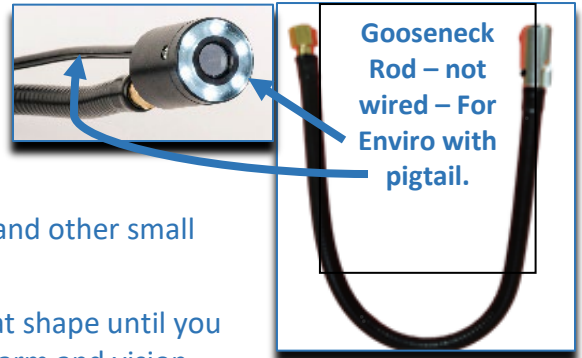
7/8" Diameter Grey Rod, 2.5 Feet Long Product # 202022

## Gooseneck Rod for Enviro Cameras Before 7.1.21, Product # 202100

Gooseneck Rod - This flexible rod attaches to the Enviro Camera to scan ash dumps, attics, crawl spaces, chimney chases, and other small areas (not wired).

It's 24" long and is flexible enough to form an S-shape. It holds that shape until you bend it. Add rods for more length. It's a great way to extend your arm and vision.

A wide variety of rod adapters are available.



## Gooseneck Rod for Chim-Scan® Enviro Camera From 7.1.21 On, Product # 202100-1

The Gooseneck Rod is similar to the Gooseneck Rod above but *includes wiring* for a 4-pin connector. It works only for Enviro Cameras made on July 1, 2021, and after.



## Optional Add-On's - Replacement Parts

**Lighthouse™ and Tilt Lens Cover:** Each lens includes replacement directions, or you can view a video on our website using the Q.R. Code below right). Also, see pictorial instructions, page 25.



**Change  
Lighthouse  
Lens Video**



**Lighthouse™ Lens (above left):** Optical Clear Acrylic replacement lens for Lighthouse™ Camera, **Product # 0761.**

**Lighthouse™ Tilt Lens (above right):** Longer Optical Clear Acrylic replacement lens for Tilting Lighthouse™ Camera, **Product # 0761-T.**

**1 Amp Fuses (2 per bag)  
Product # 1801-F1A**  
**2 Amp Fuses (2 per bag)  
Product # 1801-F2A**



**T-Wrench (widely used)  
Product # 1801-T**



**The 1/8" T-Wrench is universal. It's included with each camera. Use it to remove rod adaptors, remove or adjust whiskers and to remove the Enviro or Chim-Scan® Enviro Camera from the Cheesebit Bracket. If you lose yours, you can use a 1/8" Allen Wrench.**

**4GB SD Card –  
Product # 1801-C**



**Maximum SD Card  
Size is 8GB.**

# Troubleshooting

## SD Card Issues

- Be sure that the S.D. card clicks into place. There is a spring inside to remove the card; pushing the card again pops it out. Don't push too hard, or you can break the S.D. Cardholder. Once removed, you can review the photos and videos on the card.
- Ensure SD is Unlocked – see the small (white) tab on the left side.
- Clear off the data on your S.D. card daily and ensure the card has not gathered debris.

## The unit won't turn on.

- Check AC/DC switch. Make sure it's on A.C. if plugging the unit into the wall. Be sure it's on D.C. if using a battery pack.
- Check 2-AMP Fuse
  - If you change the fuse and the unit still won't turn on or hear a 'Pop,' the unit needs to return (see more on Fuses, next page)

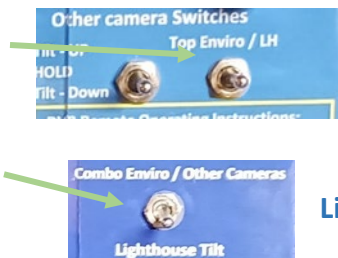


## Blue Screen (Q.R. code at right):

- Check the 1-AMP Camera Fuse (see Fuses on the next page).
- Flip the SD BYPASS switch to see if you have an image. If you don't, check the camera/cable connections.
- If you have the 100, Check the Top Enviro/L.H. Switch (if you have it). The L.H. side is for the Lighthouse™.
- On the 211, check the Combo Enviro/Other Cameras switch. The *Other camera's* side is for the Tilt.
- Check F9 on the keyboard for a video overlay screen blue or black-white (if you have a keyboard)
- If the Cable is still working, but the connector body is loose, it usually lacks a connector screw to secure it in place—Strip off the shrink tube and two screws from the connector base. Push forward and then insert a screw back over the head—tape with three layers of electrical tape over the shrink tube area.
- Ensure a secure cable connection between all cables before sending the camera up the chimney.



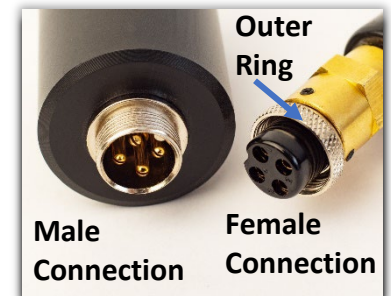
Troubleshooting/Blue Screen



Lighthouse™/Lighthouse™

Place connector into slot to align the pins, then push together. Turn **only** outer ring until tight.

For troubleshooting help or repairs, call 641-472-4872 or 641-451-4088. You can also text us, send us a video, or request a video call.



Only in units built between summer/2020 through spring/2022.

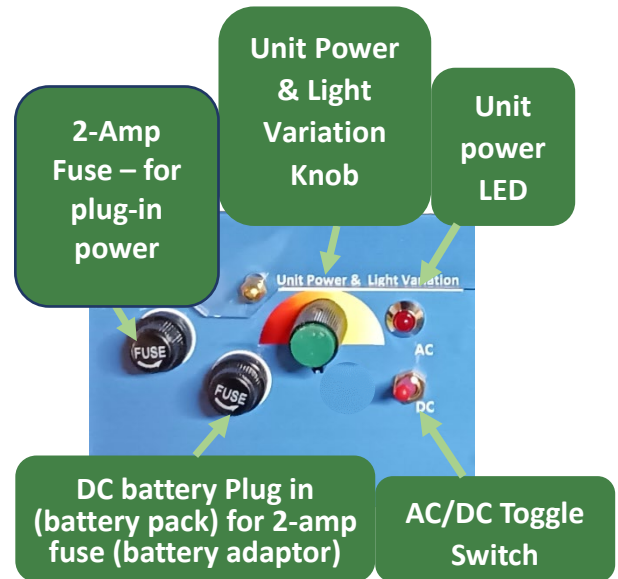
# Troubleshooting, Continued

## Blown Fuses

If the power does not turn on, replace the 1<sup>st</sup> 2-AMP fuse on the lower left of the controller. Also, check the 2<sup>nd</sup> fuse to the right of this one (for the battery pack). If the controller works, but the camera doesn't replace the 1-AMP fuse on the lower right of the controller. If both fuses are blown, unplug everything, and please contact us – it may need repairs.



The camera fuse is on the lower right of the controller. It is a 1-AMP fuse. If the camera is not working, replace this fuse. If this camera and other fuses are blown, please contact us – it may need repairs.



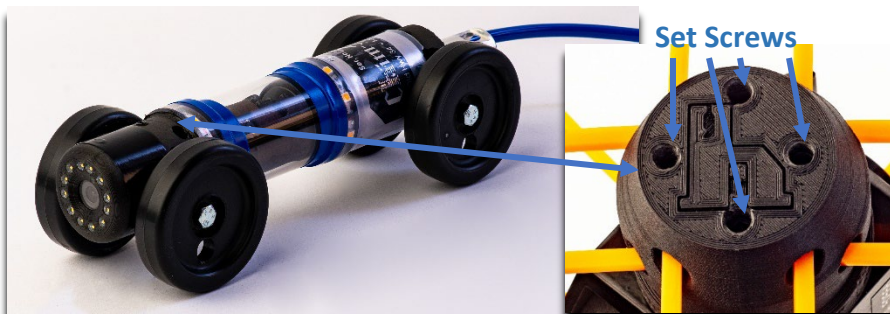
## Miscellaneous Issues

- Trouble shutting the lid; don't force it. Check the lid groove to see if anything is in it.
- If the date and time stop working, it's time to change the battery.
- Don't put anything on top of the interior reeler (211) that may prevent the case from shutting. Forcing the case shut can also damage the screen.
- USE stabilizers on the camera ALL THE TIME! Sometimes, the opening to view the chimney may only be a 2"x2" hole. This situation requires taking all the stabilizers off. Travel up the first flue slowly.



To attach wheels, loosen the set screws holding the orange whisker stabilizer (or white stabilizers) on the Lighthouse Tilt or J3D cameras. Slide them out and set aside. Slide the wheel axles into opposing sides on the camera where the orange whiskers were removed and tighten. Use the reverse process to remove them and reinstall the stabilizers.

This new style whisker hub attaches to cameras with a KwikLock Head. Available for Orange or White



Whiskers J3D



View how to change whiskers, with QR.

# Upgrading your Chim-Scan® Camera System

## To upgrade a Lighthouse™ Camera to a Tilt Camera:

1. Fill out the repair form on our website  
[www.chimscan.net/repairform](http://www.chimscan.net/repairform)
2. Tell us that you want the tilt upgrade for your Lighthouse™.
3. Box up the whole unit and send it to  
1643 Old Hwy 34, Fairfield, IA 52556

3a. We need the whole unit back to install a switch and upgrade the camera.



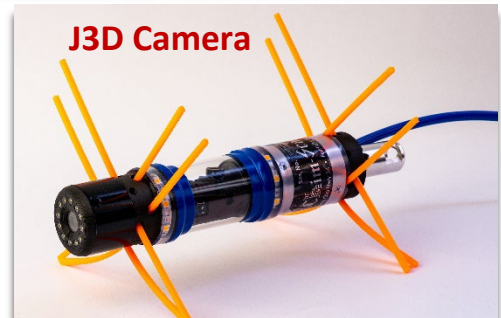
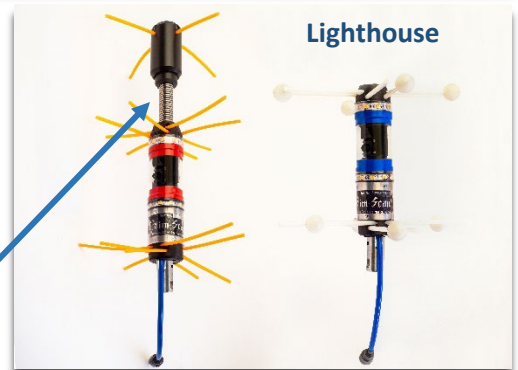
## To upgrade any combo camera to a J3D Camera with optional wheels:

1. Fill out the repair form on our website  
[www.chimscan.net/repairform](http://www.chimscan.net/repairform)
2. Tell us you want to upgrade your Combo to a J3D.
3. Box up the whole unit and send it to 1643 Old Hwy 34, Fairfield, IA 52556

3a. We need the whole unit back to install a switch and upgrade the camera.

Note: If you have a single camera (ex: just the Lighthouse™ or the Enviro) and want to upgrade, you must purchase a second camera.

A combo camera can look like this (or with white rod here).



Any Lighthouse Camera can be upgraded to either a Lighthouse Tilt or a J3D Camera.



**New Battery Adapter**



Upgrade Info

Want to know if your unit or camera can be updated?



Send us a Photo or Video of the unit .

Use the QR code or send email to [info@chimscan.net](mailto:info@chimscan.net)

For troubleshooting help or repairs, call 641-472-4872 or 641-451-4088. You can also text us, send us a video, or request a video call.

# Repairs and Upgrades

We have a full-service repair and upgrade department to help you.

Call 641-472-7643, send a text, picture, or video, **or use our Q.R. Code (at the bottom)**. You can call, text, or send a video to 641-472-4872 for troubleshooting or repairs. If you have a question on the status of a repair or general repair, you can call, text, or send a video to 641-451-4088.

Please fill out a Repair Form on our website: [chimscan.net/repair-form](http://chimscan.net/repair-form), fill it out or print it, fill it out, and send it. Please include it with the repair or email it to [info@chimscan.net](mailto:info@chimscan.net) for a quote. Giving us details about the problem helps with our diagnosis process. It's not always an obvious problem.

Ship unit for repair to Estoban Corporation, 1643 Old Hwy 34 Fairfield, IA 52556.

Be cautious of the following when packing the unit:

- **Trouble shutting the lid; don't force it. Check the lid groove to see if anything is in it.**
- **Don't put anything on top of the interior reeler (211) that may prevent it from shutting. Forcing the case shut can also damage the screen.**



For troubleshooting help or repairs, call 641-472-4872 or 641-451-4088. You can also text us, send us a video, or request a video call.

# Sending Your Equipment to Us for Repairs/Upgrades

## HOW TO REMOVE & SHIP THE CONTROL BOX OR REELER.

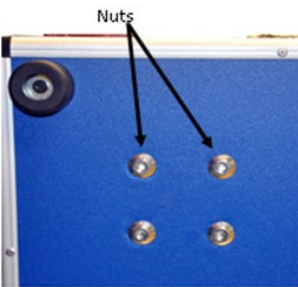


For the series 210 Control boxes, simply undo the 2 hex screws on the top of the unit and disconnecting the Controller cable from the reeler cable. Place into a Large Flat Rate USPS box and it's ready to go.



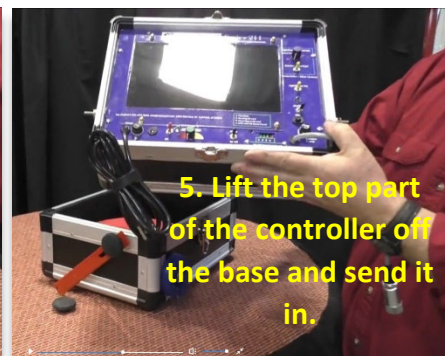
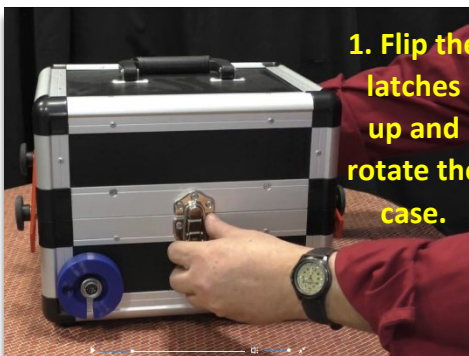
**REMEMBER: ONLY Tighten Set screws till snug, DO NOT overtighten. Over tightening leads to future issues.**

The reeler, simply undo the 4 nuts on the bottom of the case. Disconnect from the Camera and the Controller, wrap up in some form of packing, and put in a Medium Flat Rate USPS box.



For troubleshooting help or repairs, call 641-472-4872 or 641-451-4088. You can also text us, send us a video, or request a video call.

## Sending the 211 Controller back for repair



Scan this QR Code to see this process on our website.



*Video*

## What to do – if your Chim-Scan® Isn't Working or Needs Repair

1. Review page 55 of this manual – Troubleshooting.

A. If you still have issues after reviewing the troubleshooting guide, call us at **641-472-4872 or 641-451-4088**, or text us with photos, videos or to request a live call. You can also email us at [info@chimscan.net](mailto:info@chimscan.net). Keep in mind that the email address is **.net**, not **.com**.

2. Fill out the Repair Form in this manual or online on our website. [www.chimscan.net](http://www.chimscan.net)

3. Pack up what needs fixing. Please don't send the whole thing if only the cable, controller, or camera needs fixing. Remove any items not needing repair, including the manual, rod adaptor, knobs removed to send back the top controller, etc.

***There are several questions and information we need on the Repair Form.***

### Why do we want to know all of this:

Because it can take up to 4 business days (depending on your location and how you send it) for your unit to arrive here, this form acts as a packing list for us, so should the box be damaged, we can verify we have everything you sent. Also, this form helps us know who sent the unit and any updates in your contact information, such as address, phone, email, and contact person. It also provides us with where to send it since sometimes the shop location and office differ. Shipping tags on returns don't always give us the information we need to get your shipment where you want it to go.

### How does this help you?

By filling this out, you help us and your office staff (even if you are the office staff) with what needs to go, what you were sending, when, and why you're sending it. If you keep a copy of this, you can track how often you send a unit or units back for repair and what needs repairing or upgrading. If you notice you're constantly sending a cable back for repair, you can track down the cause.



On the following two pages we included the repair forms. Please fill them out and email to [info@chimscan.net](mailto:info@chimscan.net) or you can fill out the forms online at our website [www.chimscan.net](http://www.chimscan.net) and choose Repair Form in the top menu. Another option is to scan the QR Code, at right.

For troubleshooting help or repairs, call 641-472-4872 or 641-451-4088. You can also text us, send us a video, or request a video call.

# Chim-Scan® Repair/Upgrade/Estimate Form Page 1

## Chim-Scan® Repair Form

Please send this with every repair .

Name: \_\_\_\_\_

Name of Company Owner (if you're not the owner) \_\_\_\_\_

Company Name: \_\_\_\_\_

Email: \_\_\_\_\_ Date your sending or sent unit: \_\_\_\_\_

We do not spam or sell information - please list the email for the person we should contact.

Phone #: \_\_\_\_\_ or Cell# \_\_\_\_\_ Chim-Scan Serial #: \_\_\_\_\_

Preferred method of shipping:  USPS\*     UPS\*\*    \*\*If you want us to ship the repair back with UPS - we ship Ground unless you request 3 day,2nd, or next day. NOTE: 3rd, 2nd, and Next day shipping is expensive.

\*If you want us to ship the repair back with USPS, we ship Priority. Please list the address that receives mail.

Ground  3 Day  2nd Day  Next Day

- If you have a Multiple Units, you may want to give them Names. This serves 3 purposes:
1. By giving a unit a Name it's easier to keep track of it's repair history
  2. It makes the unit more recognizable, you'll remember a name faster then a serial #
  3. People tend to take better care of something if it has name.

If you'd like to list the name of the unit below, we'll put a sticker on it so everyone will know it's name

\_\_\_\_\_

**What are you sending?** *please check mark all that apply*

**Whole unit**  \_\_\_\_\_ (controller, camera, and cable)

**Just a Controller**  \_\_\_\_\_ **Multiple Controllers**  \_\_\_\_\_  
*(The monitor/computer/brain) (PLEASE wrap separately)*

**Just a Camera**  \_\_\_\_\_ **Multiple Cameras**  \_\_\_\_\_  
*(aka the head or spinney part) (PLEASE wrap separately)*

**Just the Cable/Reeler**  \_\_\_\_\_ **Multiple Cables/Reelers**  \_\_\_\_\_

**Multiple whole Units**  \_\_\_\_\_  
*(We DO NOT recommend sending units in same box.)*

**Not Really Sure / Have No Clue**

**If sending a camera: What type of Camera ?**  
*please check mark all that apply*

<input type="checkbox"/> Auto Focus (AF)
<input type="checkbox"/> Auto Focus with Tilt (AFT)
<input type="checkbox"/> Enviro Camera (ENV) - aka Top camera of Combo
<input type="checkbox"/> Enviro Camera in Cheesehead bracket
<input type="checkbox"/> Cheesehead Auto Focus (CAF)
<input type="checkbox"/> Lighthouse Camera (LH)
<input type="checkbox"/> Combo(LHC(Lighthouse with Enviro))
<input type="checkbox"/> Lighthouse Camera Tilt (LHT)
<input type="checkbox"/> Tilt Combo (LHTC(Lighthouse Tilt with Enviro))
<input type="checkbox"/> Remote Focus(RF) circa. Before 2005

**If your sending a controller or a whole unit:**  
**What type of Image/Video recorder doe the unit have?**

<input type="checkbox"/> None
<input type="checkbox"/> SD recorder
<input type="checkbox"/> Mavicap - Floppy Disk
<input type="checkbox"/> DVD
<input type="checkbox"/> CF or Compact flash

**Would you like to do an Upgrade?**

<input type="checkbox"/> No - Just fix it
<input type="checkbox"/> No, but send information on what can be done
<input type="checkbox"/> Yes - add the Tilt to my Lighthouse Camera* **
<input type="checkbox"/> Yes - update combo to Flex combo***
<input type="checkbox"/> Yes - update combo to Flex combo and add Tilt to my lighthouse.* ** ** *

*\*Requires Controller comes back so switch can be added.*  
*\*\*Requirements owning a Lighthouse camera*  
*\*\*\*Requirements owning a Combo camera*

Please put Notes on the back.

# Chim-Scan® Repair/Upgrade/Estimate Form Page 2

Tell us what happening / what's Not happening / what you talked about with Tom or Shelley

The more we know the better.

SCAN THE QR CODE TO FILL OUT THE REPAIR  
FORM AND OBTAIN ESTIMATES FOR REPAIRS.  
YOU CAN ALSO USE THIS FORM FOR ESTIMATES  
ON UPGRADES.



# Chim-Scan® Rentals

## Rentals are available to Current Chim-Scan® Customers at a minimal cost.

We have rental units available for existing Chim-Scan® customers to use when your unit or camera is not working. Here is what the unit is like:

- The Series 100 case is pink, differentiating the unit from your other units, so you know which one needs returning.
- The unit has either a Chim-Scan® Enviro Camera or Lighthouse™ Camera; it depends on the availability. The unit has switches for the Combo Lighthouse™ Cameras.
- Each Unit and Camera have a name - for example, the unit shown here is Myrtle (we have found that techs usually take better care of the equipment if it has a name (i.e., *Get Myrtle out of the truck*)).
- Need a camera only? The Lighthouse™ or Chim-Scan® Enviro Camera are the only two we send out as rentals.



## How to get a Rental Unit:

1. Call or email for availability
2. We ask questions about your broken unit to see what needs to be returned, whether it's the camera, the controller, or both\*.
3. If we have one available,
  - We require a signed credit card authorization form if we don't already have one. We provide a copy on the following page.
  - We'll send you an invoice payment link for \$125 to cover **shipping both ways for the rental unit only**.
  - Once that's paid, we'll box up a Pink Rental and send it to you via U.P.S.
  - Once the Rental Unit has arrived according to the tracking number,
    - You have a week to ship your unit to us for repair or an update.
    - Once this week has passed, we will charge you \$175 a week until your unit arrives.
4. Rentals are free to use while we are repairing yours. We will send you the repair invoice with U.P.S. Labels and tracking numbers.
5. **Once we return your unit, you have one week to return our loaner, or it's a \$175 charge per week past the allotted time!**
6. **Also, we bill you any repairs needed to Rental Units upon return (usually replacement of the acrylic lens on the Lighthouse™ = L.H. \$30).**



\*When we send the rental, we include a return tag for your repair. You should be able to reuse the rental box to send your unit. When the label is attached, you can give the repair to the U.P.S. driver or U.P.S. Store.

\*\*When we return your repaired unit, we include a *return U.P.S. label* for you to send back the rental. If we do not receive the rental back within the week, we begin to charge \$175 each week after that until it returns.

If it is an easy fix to your camera, you could save on shipping costs by scheduling your work around the repair. We may be able to get the camera back to you within a few days depending on our workload.

# Credit Card Authorization Form

This Card Authorization Form permits us to charge your credit card if you want to take advantage of our rental program (pg. 59) or if you select a payment plan. You can email the form to us at [info@chimscan.net](mailto:info@chimscan.net). If you have any questions, please call us at 641-472-7643.

## Card authorization form

I, \_\_\_\_\_, give permission to Estoban Corporation to charge  
**Buyer name** **Business name**

my card for the following purchases. My card details will be stored in my profile and will only be used for approved purchases.

**Total  
Amount  
Authorized**

**Product/service: Chim-Scan Series**

**Cardholder email**

**Estimate or Invoice #**

*All fields required*

### Card information

**Card type** Credit  Debit

MasterCard

Discover

VISA

AMEX

Other

\_\_\_\_\_  
**Cardholder (Name on card)**

\_\_\_\_\_  
**Card number**

\_\_\_\_\_  
**Expiration date**  
(MM/YYYY)

\_\_\_\_\_  
**ZIP code**  
(From credit card billing address)

\_\_\_\_\_  
**CCV (Security Code)**

### Recurring payments information

**Charge every:** Month

**Email receipts to:**

**Payment amount** <sup>1</sup> \_\_\_\_\_

**Deposit will be charged**

**Date of shipment**  **Date order is placed**

**Monthly Payments start 30days after ship date.**

**Half down:** \_\_\_\_\_ **and the balance over 3 Months -**

**Terms of agreement**

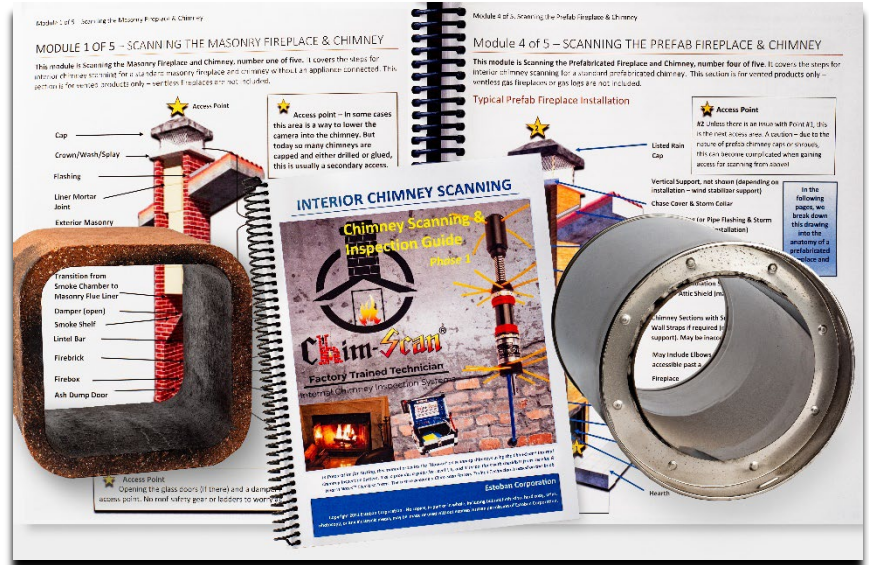
\_\_\_\_\_  
Customer signature

\_\_\_\_\_  
Date

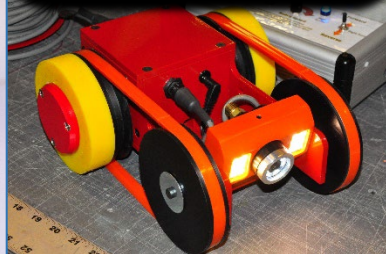
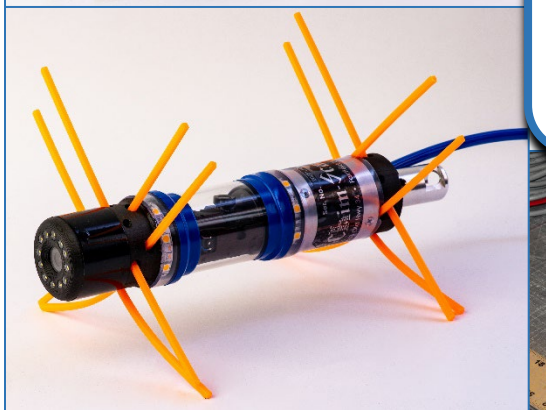
# Estoban Corp – Leaders in chimney scanning technology for over 40 years!

**WE ARE SO DEDICATED TO YOUR SUCCESS THAT WE WROTE THE INTERIOR CHIMNEY SCANNING BOOK FOR YOU!**

**THIS BOOK HAS OVER 400 COLOR PHOTOS TO SHOW YOU THE INTERIORS OF AMERICAS' CHIMNEYS AND EXPLANATIONS OF HOW THE DEFECTS HAPPENED. IT'S A GREAT REFERENCE BOOK!**



**Chim-Scan® - Where Innovation is our passion!**



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