Chim-Scan® Series 210 System Operations Manual



Due to continuing improvements, actual product may differ slightly from photo.

NOTE: In order to have a well rounded manual that can answer most of your questions, we have created a Universal manual for each series of unit. This means that will instructions for every type of camera and stabilizer.

This way if you buy another camera or stabilizer, you'll have all the info you need to set it up.

So please anticipate that not everything is going to apply to your unit. IF your need clarification please call or email. Thanks Estoban Corporation



CAUTION

Secure Camera Equipment in all applications. If NOT, Damage or Personal injury can occur.



Table of Contents Page # 3 Troubleshooting Guide 4 Terms and Warranty 7 **Precautions** 9 Video Scanning Interpretations 11 **Scanning Procedures** 16 Principles of Scanning 17 Stabilizers Hook up-Cables 20 21 Start Up Procedures 23 Control Box Details 29 Camera and Camera setups 33 Optional Keyboard and Battery 36 SD Recorder 43 Copy of Repair Form

Find us on Facebook on the Estoban Corporation page or in the Chim-Scan Group.

Find more videos on our YouTube Channel - ChimScan1643

Troubleshooting Guide

- ◆ Trouble shutting the lid, don't force it. Check the lid grove to see if there's anything in it.
- If the date and time stop working, it's time to change the batteries
- ♦ Be sure that the SD card clicks into place.
- ♦ Make sure SD is Unlocked see small yellow tab on left side.
- ♦ Clean off your SD card every day.
- ♦ USE stabilizers on the camera ALL THE TIME!!!!
- Make sure there's nothing on the reeler when you close the case.
- Error Message on Screen (1ST ADV7180 FAIL), turn unit off, take the double AA batteries out, put them back in, and turn the unit on
- ♦ Unit won't turn on
 - Check AC/OFF/DC switch. Make sure it's on AC if your plugged into the wall and on DC when using the battery pack.
 - Check 2amp Fuse
 - If you change the fuse and the unit still won't turn on or you hear a 'Pop' the unit needs to come back.

Blue Screen:

- Check the 1AMP fuse
- Flip the SD Bypass switch to see if you have an image. If you don't, check the camera/cable connections.
- ♦ Check the Cam1/Cam2 Switch (if you have it) (Cam 2 is for auto focus tilt cameras and Lighthouse)
- ♦ Check the AFT/Combo switch (if you have it)
- Check F9 on the keyboard for video overlay screen and not blue (if you have a keyboard)
- Make sure ALL cables are connected before sending camera up the chimney.

Still having issues, call Estoban Corporation 1-800-722-8439

Estoban Corporation

Manufacturer of Specialty Vision Equipment

TERMS AND CONDITIONS OF SALE

- ♦ All goods are sold with manufacturers' warranty only.
- ♦ All returns must be made within seven (7) days and must be accompanied by sales invoice and return authorization number (RA#) issued by Estoban Corporation. Estoban reserves the right, at its discretion, to pro-rate a refund in lieu of repair or replacement.
- Merchandise for refund or replacement must be in original packing, containing the correct serial and model numbers, instruction manual, and all accessories.
- ♦ All returns will be assessed a fifteen (15) % restocking fee.
- All special order items must be accompanied by a twenty-five (25%) nonrefundable deposit.
- No returns or refunds on special order merchandise.
- Estoban Corporation has a twenty-five dollar minimum fee for handling and shipping. Any merchandise returned to us must be on a freight prepaid basis only.
- ♦ Accounts will be subject to a 1.5% service fee per month.
- ♦ All merchandise which requires factory repair, will be assessed a minimum fee of \$85.00 plus all shipping charges. Estoban does not undertake repair at the customer's site.
- ♦ To return any equipment for repair,
 - Call the repair center for an authorization, at 1-641-472-7643.
 - Fill out Repair Form on our website (www.chimscan.net) or print out the repair form and send it with unit.
 - If we received a repair <u>without</u> a Note or a filled out copy of the Repair Form whether in the box or by email, the unit will be put at the end of line.
- Estoban Corporation minimum bench charge to check, or *give repair estimate* is \$85.00 *Estimate* will be credited towards final repair charges.
- On equipment returned for repair (<u>past warranty</u>) such as Camera image sensor, focus mechanism, tilt mechanism, monitor repairs, and control box, repairs completed are subject to 30 day repair warranty only. All shipping charges are your responsibility.
- Cable repairs are not covered by any warranty and are not subject to the thirty (30) day repair guarantee.
- ♦ All repairs will be on prepaid or credit card basis only.
- ♦ All above terms and conditions effective 4/23/15.

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.

Subsequent re-sale is not covered by this warranty and claims subsequent to the warranty period will not be entertained.

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

Specifications are as follows:

All SD Recorders, LCD screens and Digital recorder carry a 90 day limited warranty (shipping not included).

All Fixed Focus, Auto Focus and Remote Focus cameras and interior LED lights in these models, carry 1 year parts and labor (shipping not included).

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

All LED Exterior lights carry a 90 day warranty parts and labor (shipping not included).

All incandescent screw in lights, cables, and stabilizers are non-warranted items.

All warranties will be voided if either the whiskers or blowfish or special brushes supplied by Estoban are not used.

Use ONLY Kwik lock rods, Button lock rods, Torque fit rods or CeCure rods. Warranty will be void if other rods used.

<u>Estoban warranties do not extend to any goods or parts which have been subjected to misuse, modification, lack of maintenance, or damage resulting from fire, flooding, lightning or explosion.</u>

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 IN LIEU OF REPAIR OR REPLACEMENT.

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

All prices and design specification are subject to changes without written notice. This manual is copyright by Estoban Corporation. No part of this manual shall be copied without written permission from the Estoban Corporation. All directive may be sent to, 1643 Old Hwy 34 west, Fairfield, IA. 52556

Phone: 641-472-7643 E-mail: info@chimscan.net Website: www.chimscan.net

Enhancing/Continuing Education

We encourage all owners of Chim-Scan systems to continue their education and knowledge of the chimney and venting industries by attending these course as outlined below.

- CSIA continuing Certification programs
- CSIA Diagnosis and Documentation Seminars Levels 1 and 2
- F.I.R.E. Programs
- NFI Venting Technologies and Installer Classes
- WETT Programs Canada
- "First Friday Seminars" held monthly at Estoban headquarters in Fairfield, Iowa

Precautions

- Do not operate Chim-Scan systems in <u>ambient</u> temperatures exceeding 122 degrees or lower than 14 degrees.
- Keep Units at room temperature at all times for proper operation. **Extreme temperature* changes** will cause erratic operation and can lead to repairs.
 - *Leaving unit in truck when temps are below32° or above 80°. Best way to remember If your 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 a bit to adjust to the job sites temp.
- Use the unit for appropriate levels of inspection. Do not use in wet areas
- Do Not <u>cut</u> the grounding prong on the power supply plug, or modify powers or cables <u>this will void all warranties if done.</u>
 Use caution for all 120-240V applications.
- Do not abuse the cable connectors. Never carry the camera by the cable, or yank them apart when disconnecting.
- Do not submerge the system in any water, or use outside while raining or snowing without proper protection.
- Do not break the seals on either cameras, monitors, LCD screens, or control boxes. There are no <u>User serviceable</u> <u>Parts inside</u>. *If* any seals have been broken ALL warranties are Void.
- For best application and proper visibility, it is best that the chimney be swept before scanning.

- <u>Do Not</u> lay anything on top the LCD that may crush the screen. This will damage the screen beyond repair. (NON-WARRANTY REPAIR)
- Do not force SD card into slot this can cause the SD Card to break the shield on the SD Recorder and then fall into the controller.
- Do not (try to) remove the Monitor or SD Recorder, from case. You will cause damage and whole unit will need to sent to Estoban for repair. All Warranties will be Voided!
- Use a stabilizer, at all times on the camera, whether it is a whisker, blowfish, or soft bristle chimney brush.
- WARRANTY IS VOIDED IF A STABILIZER IS NOT USED
- Because of the expense of the units, its important to list the system 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.

Video Scanning / Interpretation

Video scanning is a <u>procedure</u>, more that a technique.

Following a path from one chimney section to another, following a procedure, makes the scan a complete close up picture of how the chimney was built, and what is taking place within the chimney. Each chimney tells a story, even the most sooty ones.

The camera position or angle play an important part in familiarizing yourself with the new perspective. We recommend that you start with the 15 degree angle. This provides you with the ability to look at the chimney interior without "Too Much Information".

When the need for more information or better detail is needed, the camera can be switched to the 90 degree angle, which can produce sharp close details of specific areas within the chimney.

The basis of your opinion will need to be from a documentable source. Once the operator becomes familiar with the equipment and the visual perspectives the system reveals, guidelines set forth from the individual building codes and use of the inspection guidelines set forth in NFPA 211(2013) Chapter 14 and Chapter 15 will be of great benefit.

Also, you will need to understand the manufacturer's installation instructions, concerning installations of their products, especially prefabricated fireplaces and chimney relining systems, whether they may be stainless steel or cast in place.



Photos from





the Interior

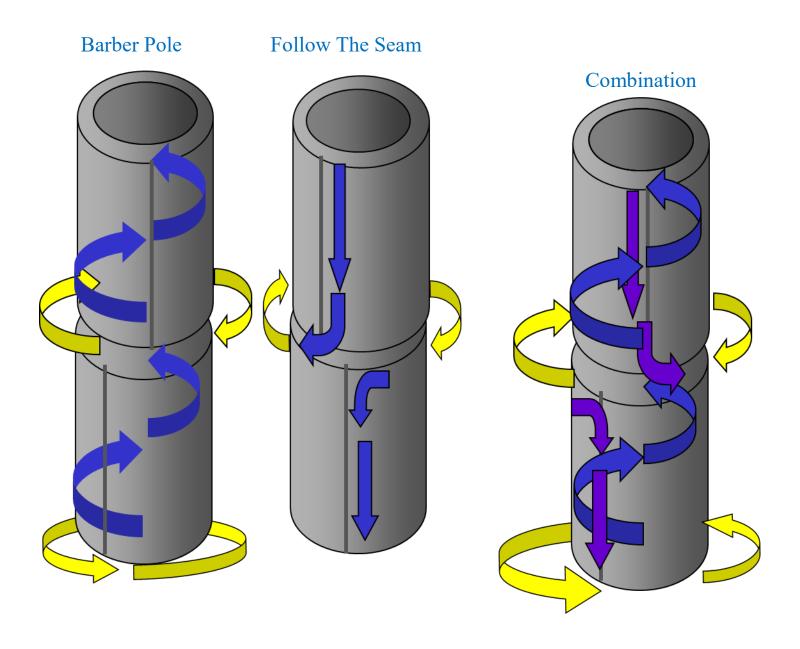


Scanning Pattern for Round Liners

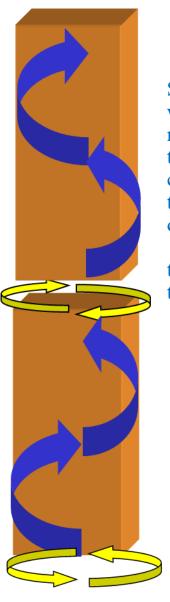
There are two ways to create a procedure for scanning prefabricated or metal liners.

The first is to use 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 going in one direction the other on the return. This way all the seams and joints are accounted for and if any abnormalities appear on the side wall of the liners, they should be seen



Scanning Pattern for Square & Rectangle Liners



Scanning masonry chimneys using a barber pole rotation within the flue. This works well in square chimneys and round liners also. Rotate in a Clockwise motion until you get to a joint, review it's condition by rotating in a counter clockwise motion. At the termination (top or bottom) change the position (if possible with your camera) or rotate opposite of before and start again till you reach the other end. Other considerations for these liners especially for 6"x18" is to use a modified whisker which would allow the operator the ability to view three sides at a time.

Scanning Procedures

The first step in creating a thorough scan is a procedure. We will go through 3 different degrees/angles at which you can scan.

*Zero degree

For front view or zero degree, place the stabilizer behind the camera head, insert into the chimney or vent and move forward. Move the camera at a rate which will allow the client to comprehend the imagery

For sectional liner or pipe slow down or stop at each joint for further study, be sure that it is connected properly and locked. The liner should not have any bends or tears.



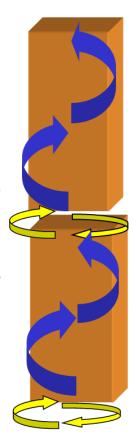
Continue to the next section. The sides of the pipe will be on the outside corners of the screen.

*For 15 degree

With the appropriate stabilizers, on the top of the camera, push the camera into the chimney and evaluate the thimble-cleanout area, or fireplace damper and acclimate yourself to the interior flue area.

Move the camera in a circular motion while pushing the camera up the flue. Since your view will be mostly the full side of the liner, be sure to view all sides before moving into the next liner.

Once you reach a joint be sure to spin the camera 360 degrees until the complete joint has been viewed. Check to see whether the liners are intact (Void of any cracks) and aligned with the next liner. If they are misaligned, allowing infiltration air or condensate from leaving the liner cavity, note the defect. All building



codes do require that the flue liners be stacked on top of each other, sealed with the appropriate cement and struck smooth in the interior of the liner. If this is not found, and the joint is open or will allow the products of combustion to escape to the interior of the chimney, this should be noted and inform the client.

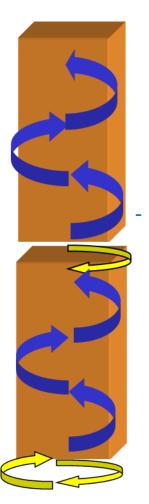
*For 90 degree

With the appropriate stabilizers, on the top of the camera, push the camera into the chimney and evaluate the thimble, cleanout area and fireplace damper, acclimate yourself to the interior flue area.

Move the camera in a circular motion while pushing the camera up the flue. Create a barber pole fashion view of the liner.

Once you reach a joint be sure to spin the camera 360 degrees until the complete joint has been viewed. Then reverse the spin direction and continue to the next liner joint. This will keep the camera cable from becoming twisted onto the Kwik Lock rods. (Regular rods right hand only)

Be sure that the joints are intact, and placed on top of the next liner squarely. If not be sure to note the defect.



Scanning From the Bottom Up

Fireplace scanning using a Blowfish / Whisker / Brush

Place the camera below the blowfish, unless you use Rovac/Button-lock rods then it goes behind the camera. Let the wheels hit the back wall of the smoke chamber, or the bottom of the first liner.

Angle the camera to pass the damper and begin the scan.

When bringing the camera through the damper, remember to turn it to the side so the lights will not rub on the damper frame. If you have a Lighthouse camera, wrap your hand around the camera and guide it passed the damper, this will help lengthen the life of the protective lens.

When using the whiskers or brush, the procedure is the same, only you may need to guide the camera into the first flue liner.

Using whiskers, the operator may wish to take the whisker hub off the camera and

reattach it above the damper. Or slowly push the whiskers through the damper. (<u>Masonry fireplaces only</u> not prefab.

Use the blowfish or special brush)

The blowfish can be placed through the damper by two ways.

1. Leaving it collapsed and sliding the wing nut up past the damper blade.

2.opening the blowfish up first and bending the slides to opposing sides and fit through the damper frame.

When placing the next rod onto the next, be sure to do it when the rod has less tension on it.

The 5 Principles Needed for Proper Scans

In order to perform interior chimney scans, it is very important to follow a procedure. If not then the information can interpreted as unbelievable.

We have designed the product in such a manner to provide the basic essentials needed to produce believable imagery that can be repeated or documented. But part of this process will depend on the operator. If they do not comply with these principles then the scan can have undesirable results

1

Clarity of Image. The C-Scan and Chim-Scan have been designed to have remote focus capabilities. Therefore the operator can change the focal length to provide the viewers with sharp imagery

2

Illumination- All the systems are provided with built in lighting control. From the interior 6 lights which can be varied at the control box, to include an optional exterior light for dark flues or larger size.

3

Position- Each system is supplied with camera brackets that will provide an angle which will enhance the scan. Whether positioning the camera perpendicular to the chimney wall, or angling down at 15 degree, or viewing straight up or down. Each bracket offers the operator a choice to provide the viewers an understanding of the interior of the chimney or ductwork.

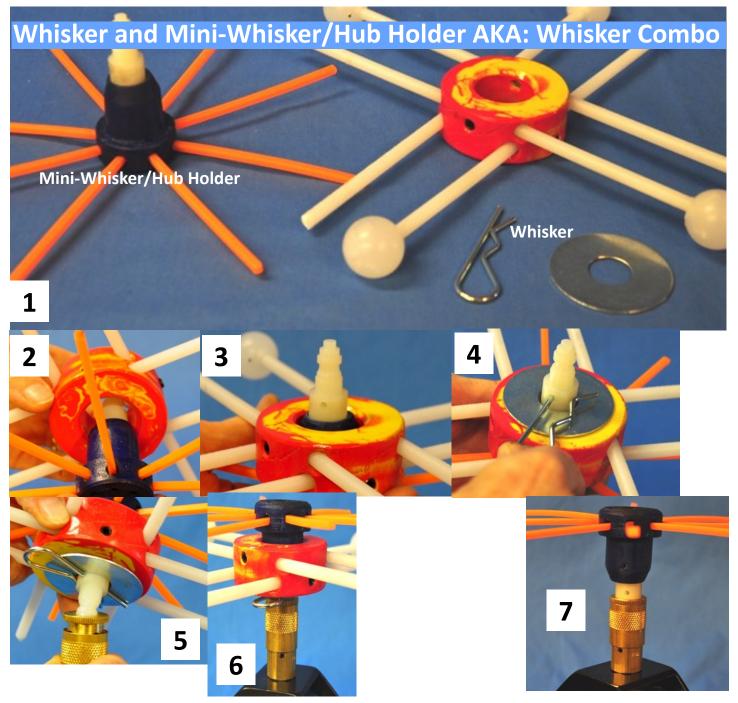
4

Stability-Each unit is supplied with a set of adjustable stabilizers to keep the camera stable within the chimney. The camera should be kept from wobbling within the chimney. Lack of stability will produce scans that are incomplete and erratic.

5

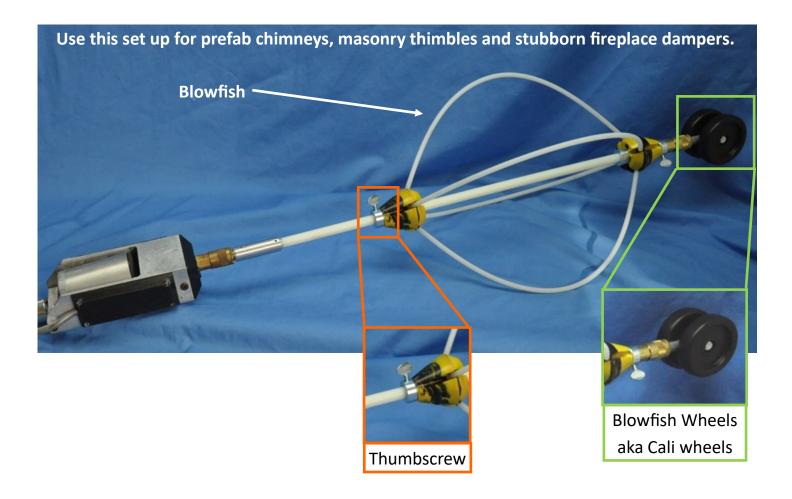
Delivery-This part of the scan is in control by the operator. It is best done by using a procedure and moving the camera at a rate that is understandable to the audience.

STABILIZERS — *<u>All warranties will be voided if Either the Whisker, Mini-Whisker, Whisker Combo, Blowfish, or special brushes supplied by Estoban are not used.*</u>



- 1. Remove the clip pin from the Mini-Whisker Hub.
- $2\ \&\ 3. Then\ place\ the\ whisker\ on\ the\ hub.$
- 4. Place large washer on hub and insert clip pin.
- 5 & 6. Place the hub on the female connector, on top of camera. Then you can adjust white whiskers to the size of the interior liner or the chimney using your T-Wrench.
- 7. The mini-whisker can be used by itself for Pre-Fabs or smaller flues.

Blowfish Stabilizer -



The center shaft collar keeps the blowfish from collapsing, should you come across an obstruction in the chimney. Adjust to size and tighten bottom thumbscrew

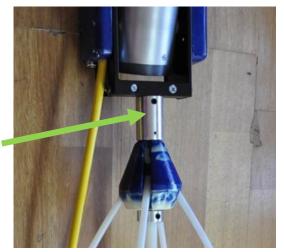


Blowfish for Ro-Vac Rods

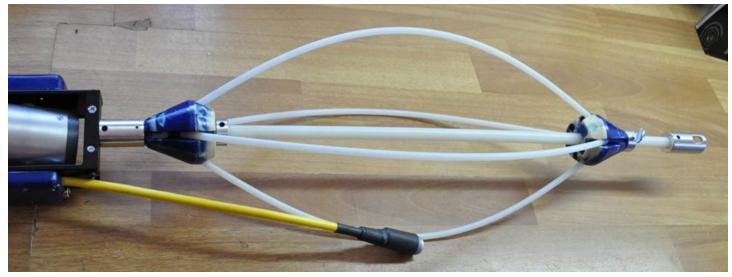


Using T-wrench, remove shaft collar and then remove RoVac adaptor from Camera bottom.

Then attach solid end of Blowfish to end of camera and tighten set screw.

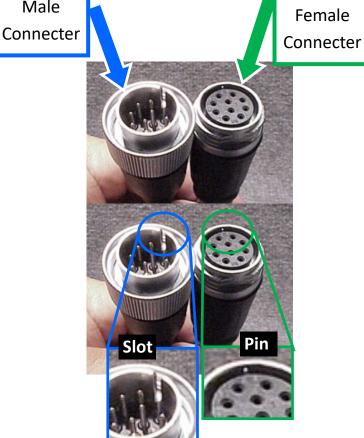


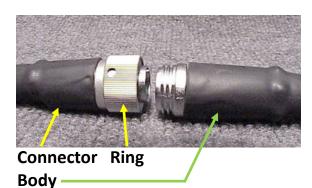
Your whisker will fit over the solid end on the blowfish, or attach mini-whisker hub to top of camera or the wheels.



Male

Cable Connectors





1) The cables are set to connect in a prescribed way.



- 2) Align the Slot and Pin, push the connecters together, and turn the locking ring.
- 3) Be sure not to push too hard when setting them together.
- 4) To take apart **loosen the ring first then** pull the connectors apart.
- 5) **Do not twist the connector body,** only the ring should turn.

Start Up Procedures

- Open the latch to the case
- Remove camera from clip pins or from under Mini-Lid.
 (This will depending on the type of type you have.)
- The cable will be connected a upon arrival, so if you wish to un do it please see page
 - ◆Pull the cable out as you do the scan. When completed, use the knob on the top of the reeler to return cable to reeler
- ◆ Turn unit on. (See page 16)
- Verify Date and Time.
- ◆ Attach Stabilizer(s) to camera and begin Scanning.





Series 210 layout

The Next pages break down the controller into different sections and explains with each switch and button does.

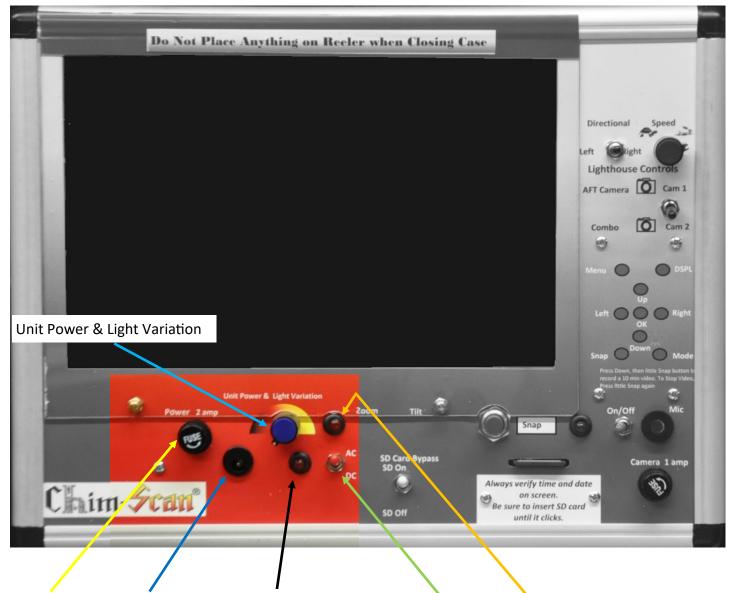
We'll go through combinations of switches and what cameras they work with.

Remember if your unit doesn't have a switch it means that it wasn't necessary for your type of camera.



Make sure NOTHING is left on the reeler when you close the case.

There is a little air space between the screen on the knob used to reel the cable on and off the cable, so if something is in that air space it will bounce against the screen causing damage. This will **void** the warranty, the Controller will have to be sent back and the Monitor replaced.



2amp Fuse DC Plug Battery power LED AC/OFF/DC switch Unit power LED

The 2Amp fuse helps control 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 unit back on. If it doesn't turn on, check the extension cord, power strip if your not plugged directly into the wall. If It still doesn't turn on, Call 641-472-7643

^{*}Plug the power supply system into a 120 volt grounded receptacle (or the 12VDC battery. Check if your AC/OFF/DC switch is in correct position. The light will come on when battery is connected only.

^{*}Rotate the power knob clockwise to power the controller. LCD monitor will come on and Monitor must stay on AV1. AV1 will display in top right corner of screen when you turn unit on.

^{*(}The two center buttons <u>on LCD</u> change it from AV1 to AV2). The system is wired to use AV1. AV2 will show a blue screen.

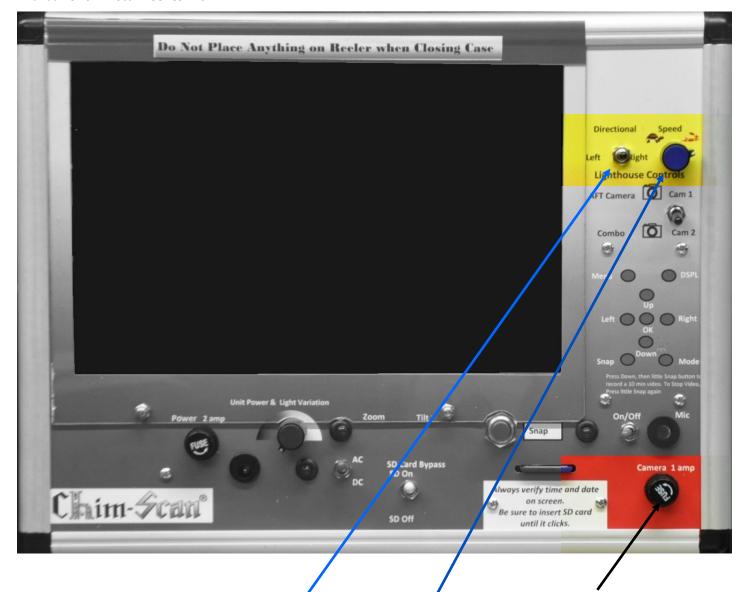
^{*}Use only appropriate charger for style and type of battery.



SD Bypass Switch

The **SD Bypass switch** allows you to bypass the SD recorder should it have issues, you won't be able to snap pictures or record video without using a external device like your Phone or Digital camera. But you will be able to keep scanning until the SD resolves it's issue or you call 641-472-7643

How to use the SD recorder is on Page



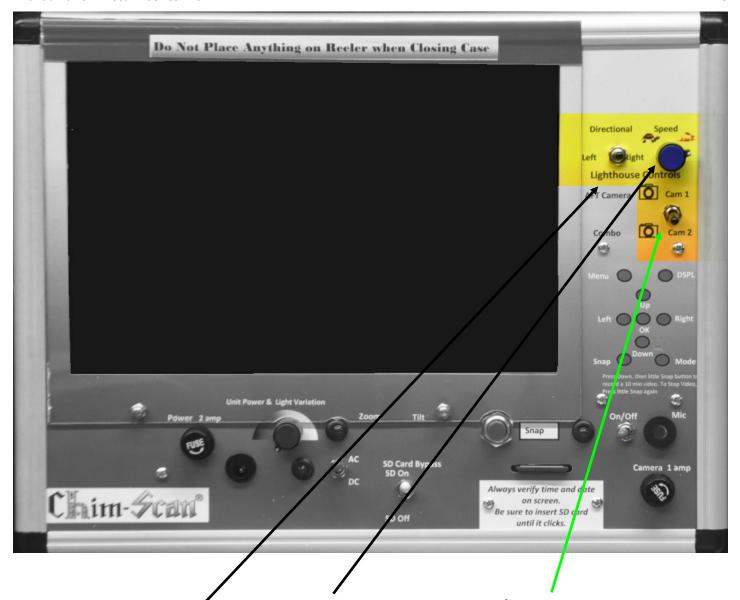
Lighthouse Switches: Rotation Direction Rotation Speed 1Amp Fuse

The Lighthouse switches control the Lighthouse camera and only the lighthouse camera.

The **Rotation direction** switches the rotation of the camera either left or right. When the switch is in 'center or stop' position, the camera won't rotate.

The **Rotation Speed** knob controls the speed at which the lighthouse rotates. It's only works on Lighthouse camera. When it's in 'Off' position, the camera with do a complete rotation in 10seconds. Once you turn in the switch 'on' it rotate faster but you'll still be able to snap good photos; even when it's at full speed.

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



Lighthouse Switches: Rotation Direction Rotation Speed Cam1/Cam2 Switch aka: Combo Switch

In this Section We're going to add the Combo switch to the Lighthouse switches. This is necessary if you have a Combo Camera set up aka: the Enviro looking straight up and the Lighthouse Below looking at the sides/joints.

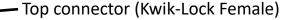
The **Lighthouse switches** work the same way as they do on page 18.

The Cam1/Cam2 switch flips between video signals. Cam 1 is the Enviro video feed and Cam 2 is the Lighthouse video feed. There may be a 2 sec delay when you flip the switch from one camera to the next, so don't panic. A bonus is that if your recording a video with the built in SD recorder (if you have the SD recorder) it will keep 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 view.

Enviro Cheesebit Camera



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



Cheesebit Bracket (Usually Red or orange)

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

Extra LED light (this is powered by a 9V battery)

Enviro Camera (this can be removed by loosening the set screw on the bottom of the camera shown

> To Adjust the angle of the camera, simply loosen the small set screw on the side of the Bracket.

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



The Cheesebit has a addi-

tional LED light, to turn the light on and off simply push/pull the switch on the top of the center



DO NOT OVER TIGHTEN!!

When it's time to change the 9V battery,

You will loosen all the screws in the bracket and remove the center hub.

When putting the hub back

sure you put the Battery

towards the side with only 1 screw - shown

here

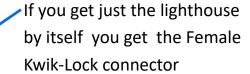


Lighthouse Camera

Lighthouse Camera rotates a continual 360°, using the Left/Stop/Right switch in the upper right hand corner of the control box. See page 18.

Depending on whether or not you got the Combo setup will determine what is on top of your camera

If you get a combo you'll have this



At the top and bottom of the Lens are 2 pieces of Electrical tape. They serve a extra protection against dirt.

Should they become damaged just replace them with more electrical tape. **DO NOT USE DUCT TAPE!!**





Lens (aka Outer Lens or Protective lens)

When the Outer lens becomes scratched it can be replaced.

- 1.Under the Electrical tape are 6 screws, simply remove the electrical tape.
- 2.Unscrew the bottom 3 screws
- 3. Remove the outer lens.
- 4. Place new lens on Camera and put the 3 screws back in.
- 5. Now remove the top 3 screws from the old lens.
- 6. Take the top of camera put it on new lens.
- 7. Replace the top 3 screws
- 8. Put electrical tape back on the camera, over the screws.

Combo or Enviro/Lighthouse set up

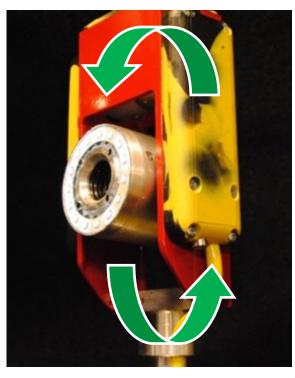


To use both camera's at once.

- 1.Use Tee wrench to remove Kwik-Lock female connector
- 2. Insert short white rod making sure the flat side is toward the set screw
- 3. Tighten set screw
- 4.Attached Enviro to short white rod; if not already attached. Also this will go easier if the cables are not connected to the Y-adaptor
- 5.Slide Modified Dryer Ball on to Enviro and tighten set screw.

REMEMBER: ONLY Tighten Set screws till snug,
DO NOT over tighten. Over tightening will lead to issues in the future.

Auto Focus Tilt or AFT



The Auto Focus Tilt or AFT for short comes equipped with the camera permanently mounted into the tilt.

The tilt is controlled from the controller on the lower right side. Should the tilt stop operating, check the 1amp fuse. This is a safety.

The tilt has a range of approx. 360 degrees, therefore the operator can view liner joints at 90 degrees or move

the camera into a broader view looking downward.

The camera has a "home" position for storage in the case and going through dampers, as shown on the right.

Be sure that a stabilizer is used with this system. All warranties

will be voided if Either the whiskers or blowfish are not used or a special brush

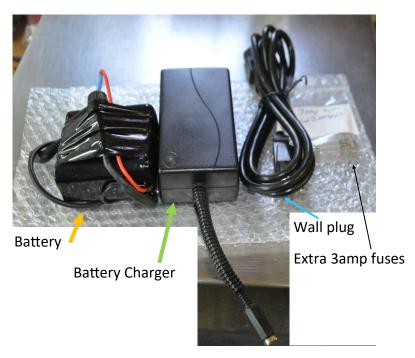




Optional Keyboard

Keyboard Commands		
Key Press	Action	
ESC	Exit editor mode	
F1	Character blink toggle	
F2	Character black background frame toggle	
F3	Character color cycle (Blue > Green > Cyan > Red > Magenta > Yellow > White) Self-generated screen mode only	
F9	Screen mode toggle (overlay > self-generated) Overlay mode requires valid input video source	
F10	Screen background color cycle (black > blue > green > cyan > red > magenta) Self-generated screen mode only	
F11	Screen translucent characters toggle Overlay screen mode only	
(CTRL)(SHIFT)F12	Clear Screen	
Up Arrow	move cursor up one row	
Down Arrow	move cursor down one row	
Left Arrow	move cursor left one column	
Right Arrow	move cursor right one column	
(CTRL) Up Arrow	Shift screen characters up one pixel	
(CTRL) Down Arrow	Shift screen characters down one pixel	
(CTRL) Left Arrow	Shift screen characters left one pixel	
(CTRL) Right Arrow	Shift screen characters right one pixel	
Home	Moves cursor to the top left corner of screen	
End	Moves cursor to last typed character on current row	
Insert	Insert a space at the cursor and shift the text to right	
Delete	Delete the current character by shifting the text to the right of the cursor left	
Enter	Move the cursor to the first column on the next row	
(ALT) xxx	Insert a special character - hold down the Alt key, type a special character decimal value, and release Alt key.	

Optional Battery Pack



Battery lasts for 3 to 4 hrs. for every 8hr charge.

To Charge Battery:

- 1. Take the small plug from the Battery and insert it receptacle in the Battery charger
- 2. Then plug in the Wall plug into the Battery Charger
- Plug Wall Plug into 120V outlet

For best results charge battery for a full 8hrs once a week if using on a daily bases.

Battery will hold it's charge for up to 2 weeks of non use.

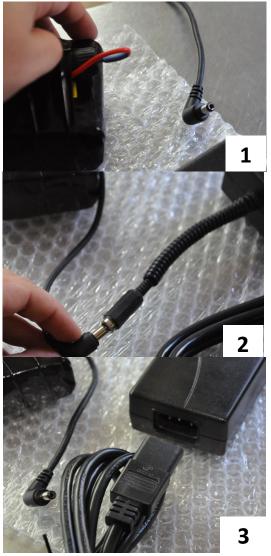


If you blow the fuse on the battery:

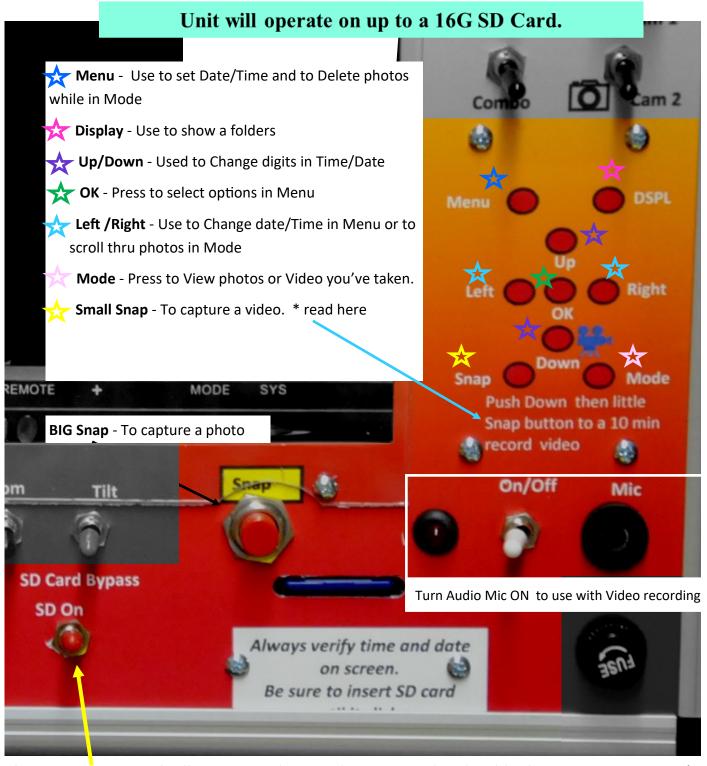
- 1. Turn off Chim-Scan and disconnect the battery
- 2. Change 3amp fuse in Battery, then check and change (if necessary) the 2amp and the 1amp fuse for the Chim-Scan
- 3. Power up the Chim-Scan with the Wall plug first to make sure it's

operating properly. Then plug in battery to Chim-Scan and turn on like normal

If the Chim-Scan doesn't turn on or doesn't seem right after you've done all this Call 641-472-7643 for tech support.



How to Operate SD Recorder



The **SD Bypass switch** allows you to bypass the SD recorder should it have issues, you won't be able to snap pictures or record video without using a external device like your Phone or Digital camera. But you will be able to keep scanning until the SD resolves it's issue

Screen Views

After starting system,
The screen will show the if you are in Still mode or video mode.

The "Down" button will change from Still to video and back.

Time and date are displayed on the screen. They do not show on your image.



View images captured go to <u>mode</u>.

Use the L/R to see the images.

If you record VIDEO, press mode,

then press down to start video. Or

you may put in any computer and it

will come up as an AVI file to view.

If you have folders from multiple dates, press "Display" to view all folders.

Use "Up and Down" to select folder you want. Then

mode, deo. Or ter and it to view.

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CHOOSE FOLDER

12111500

12111600

press "OK" to view.

Press "Mode" to return to live image

SD card insert and retrieval



Due to continuing improvements, actual product may differ slightly from photo.

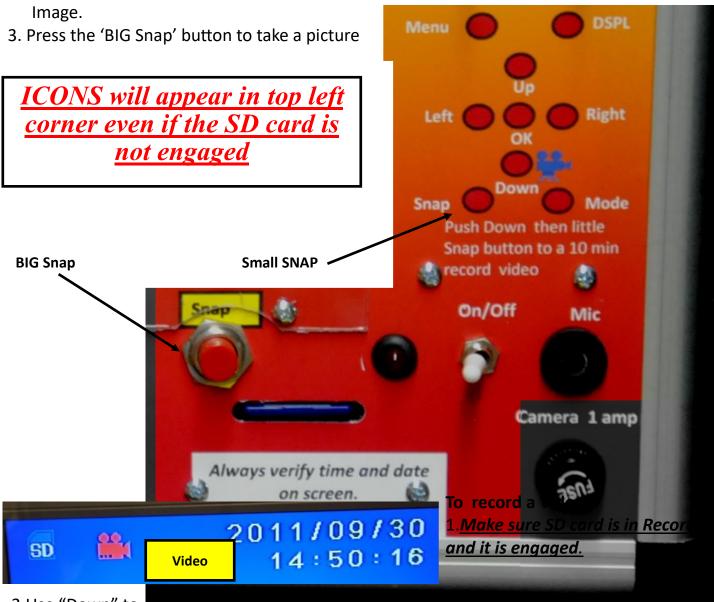
How to capture your images or video

2011/09/30 Image 14:50:22

To capture images:

1. <u>Make sure SD card is in Recorder</u> and it is engaged.

2. A camera icon will appear in the top left corner of screen like shown in the picture labeled



- 2.Use "Down" to change from camera to video.
- 3.A Video camera icon will appear in the top left corner of screen like shown in the picture labeled Video.
- 4. Press the small Snap button to start recording the video.
- 5.Be sure to turn "Audio" ON if you want to narrate.
- 6.To stop recording press small Snap button again.

How to preview your images or video

1. Press Mode to enter playback mode. If there is no file in the memory, it will show "No File" and return to preview mode.

1a. To see if the card had other photos, press Display and if there are scroll with the Up and down buttons. To select a folder press OK

- 2. Use LF/RT to forward or rewind the image or video.
- 3. Push the Mode to go back to live image.
- 4. For Video (AVI file), push Down to start playing. Press 'Ok' to stop playing
- 5. During playing, push down to pause and push down again to resume.
- 6. During playing, press RT to fast forward, can set speed of x2, x4, x8
- 7. During Playing, the icon of playing and pause will be shown.

How to Delete Images

To delete photos, while in MODE, press MENU. Use the L/R Buttons to go through the commands to the setup icon.

In the current frame it will delete one image.

Or move to the next box and delete allthe images in the memory.

Delete Single Delete All

When an Option is Highlighted in a RED box press OK to select it

To clear the SD card go to the next icon, to Delete All, use the L/R Buttons to change from the No to YES and press OK.

The images from the SD card are cleared off.





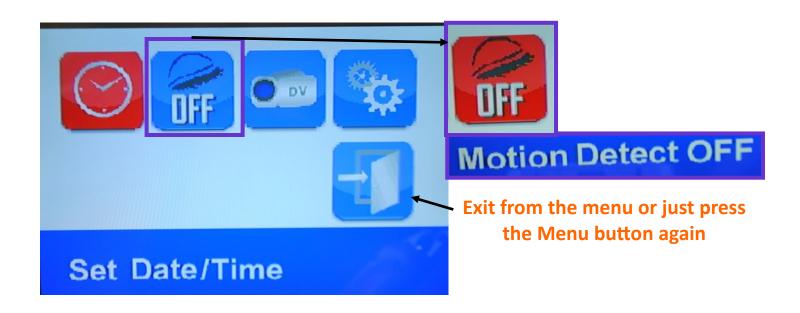
When using your unit, if there is an 'eye' here the motion detector has been turned on and

SD Ö

Occasionally you will need to replace the two AA batteries to keep time and date stamp accurate. This box is either under the controller or on the left side of the controller.

- Slide Door of box down to access batteries.
- Being careful not to pull wires from controller, replace the batteries and put all back in place.

Menu



Changing Battery for Time & Date

Use the L/R to go through the commands, to select press OK.

Make sure the motion detector is OFF. The indicator on the screen will show a movie camera for video and a still camera to capture photos.

Battery Error

If you turn on the unit an ADV7180 Fail flashes across the screen.

- 1. Turn unit off.
- 2. Remove AA batteries from battery box.
- 3. Turn unit back on IF error disappears go to #4, if not repeat #1 and #3
- 4. Put batteries back into battery box.

If the error keeps appearing, you may need to get new batteries.

Chim-Scan® and Eye-Fi®

So you've got all these great photos on the your Chim-Scan, and you want to send them to the customer or back to office so they can do a report.

How do you do that without carrying a laptop with you?? With the EYE-FI Mobi Card.

"Eyefi Mobi works like a regular SD Card but unlike ordinary SD cards, Eyefi Mobi includes built-in WiFi that connects your camera to your smartphone, tablet, PC or Mac wirelessly." From: Eye-Fi Mobi Product page

So how does it work

- 1. Read the instructions from Eye-fi
- 2. Start up the App,
- 3. Take a picture or video
- 4. Watch as it downloads into your phone.

So now all your Chim-Scan photos and videos are on your phone or tablet, you can send them where ever you want.



The best Eye-Fi card to use with Chim-Scan is the 8GB Mobi card.

Eye-Fi card are available on EyeFi.com and Amazon.com, you can find them locally at a Best Buy or bestbuy.com



What to do if your Chim-Scan isn't working or needs repaired.

1. Review page 3 of this manual - Troubleshooting

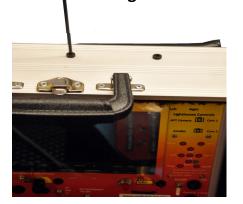
A. If your still having issues after going thru the troubleshooting guide call 641-472-7643

2. Fill out the Repair Form - available in this manual or online on our website. Www.chimscan.net

3. Pack up what needs to be fixed. Please don't send the whole thing if only the cable, controller or the camera needs fixed.

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.







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.

Chim-Scan® Repair Form

Please Print	Please send with Every Repair	
Name:		
Name of Company Owner (if your not the owner):		
Company Name:		
Email:	Date your sending/Sent Unit:	
We do not spam or sell information - please list the er		
Phone #:	Chim-Scan Serial #:	
	_	
**If you want us to ship	*If you want us to ship the repair back with UPS - we ship Ground unless	
the repair back with USPS, we ship Priority.	you request 3 day,2nd, or next day. NOTE: 3rd, 2nd, and Next day shipping	
Please list the address that receives mail.	is expensive. Please list the address you want us to send the repair to.	
What are you sending? Please check all that apply Whole Unit - Controller, Camera, and Cable Just the Controller Camera Controller and Camera Controller and Cable Camera and Cable Multiple Cameras Multiple Cables Rotator Multiple Whole Units - We DO NOT recommend sending units in the same box.	Ground 3Day 2nd Day Next Day If sending a camera: What type of Camera? Auto Focus Auto Focus Tilt Enviro Camera Enviro Camera with Cheesehead Bracket Cheesehead Auto Focus Lighthouse Camera Combo Camera Setup (the Enviro on top of the Lighthouse) Rectangle Shaped Camera Cube Shaped Camera Tell us what's Happening or What's NOT happening	
Not really sure/ Haven't a Clue	5	
If your sending a Controller or a Whole Unit:		
What type of Image/Video recorder dose it have?		
None		
SD Recorder		
Mavicap - Floppy Disk		
Polaroid Camera - was new in 1980		
CF or Compact Flash		
VCR		
DVD Not really sure / Hayon't a Clue		
Not really sure/ Haven't a Clue	More Space on back page	
Would you like Upgrades Done?	s.c space on saon page	
No - Just Fix it No - but Send information on what can be done Yes - Lighthouse Switches Only		
Yes - SD Bypass Yes - Both		

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 forms acts a packing list for us, so should the box be damaged we can verify we have everything you sent. Also this forms helps us know who sent the unit and where we need to send it back to, shipping tags don't always give us the information we need.

How does this help you??

By filling this out, you not only help us but you help your office staff (even if you are the office staff) what needs to go, what your sending, when you sent it and why your sending it. If you keep a copy of this you can track how often your sending a unit or units back for repair and what needed repaired. This way if you notice your always sending a cable back for repair you can track down the cause.