



# **HATHORN**



## **Wi-Fi REEL OPERATOR'S MANUAL**



Before operation of your system, it is advised that this manual be read carefully.

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## **LIMITED WARRANTY COVERAGE**

This Limited Warranty provides one full year of coverage under our manufacturer's standard new product warranty. Hathorn® Corporation warrants to the original purchaser of our products that the product shall function as designed for a period of one year from the original date of purchase under normal and proper usage. This one year Limited Warranty covers malfunctions resulting from defects in materials or workmanship only. If the product fails to function as designed under normal and proper usage due to defects in materials or workmanship during the period of this Limited Warranty, we will repair, adjust or replace defective parts as Hathorn® Corporation deems appropriate.

This Limited Warranty applies only to Hathorn® Corporation sewer and gas camera systems that are distributed in the United States, Canada and Australia that are purchased from Hathorn® Corporation or a Hathorn® Corporation authorized dealer as identified on our website. The Limited Warranty is not transferable under any circumstances. This Limited Warranty does not apply to Hathorn® Corporation brand products imported and/or sold by unauthorized dealers, distributors or other sellers.

## **NOT COVERED BY WARRANTY**

This one year Limited Warranty does not cover damage or malfunctions stemming from other than normal and proper usage or from products not meeting the requirements of end users. This Limited Warranty also does not cover the following: (a) intentional or accidental misuse or abuse (including, but not limited to, damage to push rod from excessive force), (b) failure to follow operating or maintenance instructions, (c) repairs by any individual or entity other than an authorized Hathorn® Corporation repair center, (d) use of product components, accessories or consumables not manufactured by Hathorn® Corporation (e) product tampering, (f) droppage, (g) battery leakage if equipped, (h) media cards, (i) excessive light damage to the camera element or (j) damage resulting from being used in extreme environments or due to weather events. Wear and tear are not covered.

Hathorn®'s responsibility under this Limited Warranty is limited to the repair, adjustment or replacement of defective parts as determined by Hathorn® Corporation in its sole discretion. Hathorn® Corporation shall not be held liable for any damages, including but not limited to direct, indirect, special, or consequential damages arising out of, resulting from, or in any way connected to the use of Hathorn products. Hathorn® assumes no responsibility for other's use or misuse of its products. Hathorn® Corporation assumes no responsibility for warranties either expressed or implied beyond that which is contained herein.

## **LIMITATION OF LIABILITY**

By purchasing a Hathorn® Corporation product you accept the terms of this limited warranty. You also agree that Hathorn® Corporation shall have no liability to you or any end user for any damages resulting from delay or loss of use of the product due to failure of the product within the warranty period, or otherwise, or in service or repair. Hathorn® shall have no liability for general, special, incidental or consequential damages arising out of the use or misuse of Hathorn® products.

You also agree that the application and use of a Hathorn Corporation product is beyond our control and is the sole responsibility of the user. By receiving and using one of Hathorn's products, you hereby acknowledge and agree that: you have selected the correct product for your intended use and will examine the product you are purchasing when it arrives to ensure that it meets your needs, you will properly test the product prior to its actual use, you and/or your organization have proper practices in place for the safe use of this equipment and that end users have been trained on its safe operation

Hathorn® products are not intrinsically safe, not explosion proof and misuse of the product may cause physical or psychological injury, pain, suffering, illness, disfigurement, temporary or permanent disability, economic or emotional loss, and death; and Hathorn® Corporation shall not be held liable for any damages, including but not limited to direct, indirect, special, or consequential damages arising out of, resulting from, or in any way connected to the improper or incorrect use of the product and assumes no responsibility for other's use of the product.

## **SERVICE**

If the product requires service, please contact the Hathorn service centre nearest to you or one of our authorized distributors. Service locations are listed on page 15 of this document. Hathorn is not responsible for damages or loss incurred in connection with mailing and/or transportation of product.

## **FREIGHT**

After completing your "Return Authorization Sheet," ship the item(s) PREPAID and INSURED to the appropriate service center. After the repair, the items(s) will be returned via the same method. (i.e. shipped in via UPS, returned via UPS. Shipped via air, returned via air.)

## **RETURN FREIGHT**

Warranty: Pre-Paid by customer as above, returned by Hathorn on our account  
Non-Warranty: Freight paid by customer both directions

## **NON-WARRANTY CHARGES**

Repairs centers will charge direct for non-warranty repairs and may require payment prior to repair. Should you have any further questions regarding service or sales, please contact Hathorn at 1-888-HATHORN.

## **PRODUCT FEATURES**

- Compatible with 18V Milwaukee™ or compatible batteries (not included)
- Stream video directly to you mobile device using Wi-Fi transmission - supports Apple and Android
- Monitor free reel, NO cords, NO heavy monitor cases
- Powerful 512Hz SONDE transmitter
- Auto-iris camera element that automatically adjusts picture lighting, no LED light dimming required
- On screen resettable footage counter
- Easy wireless video transfer from reel to any mobile device or tablet, connects up to four Wi-Fi devices
- Record in compressed video saved to your phone, easily manage video files and snapshot pictures, files can be air-dropped, texted, or emailed.
- No option to pause during recording is available.
- Voice recording overlay to keep you hands free without the need to add text
- Free downloadable Wi-Fi app from Hathorn
- Transmission distance with no obstacles is around 50ft.

# USER INSTRUCTIONS

## Download the Wi-Fi App

- Turn on the mobile device and enter App Store for either Apple or Android
- Search for the Hathorn-V4 app (latest version)
- Install the app software
- Note: You must be running iOS 13 or later for Apple



Hathorn-V3  
Hathorn ... • Tools  
500+



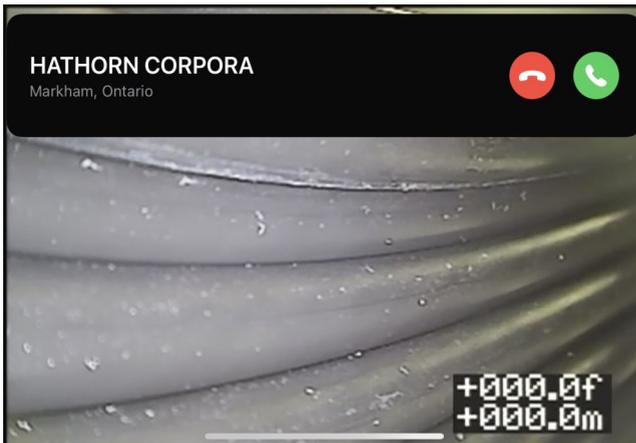
Hathorn-V4  
M.I.S. Ele... • Tools

## Setting Up the System

Connect DC power plug to the jack on the reel hub using AC/DC adapter or 18V external battery. At this point you should have lights on the camera.

Access Wi-Fi connections on your device and select the one named “Hathorn #####”. Enter password 12345678. Exit then open the “Hathorn” app and click “CONNECT”. At this point you should have video on your screen.

Note: That this network connection will block all data to the device until the connection is forgotten or another network selected.



Back



Record / Stop



Screen Shot



Photo Folder



Change Screen Ratio

## **VIDEO VIEWING AND RECORDING**

Open the app and click “CONNECT”. If the connection between the camera and the mobile device was successful, the video will begin playing automatically. If it does not, then repeat the Wi-Fi pairing steps. No option exists to pause during recording. If you wish to pause simply stop the recording and start a new one.

All pictures and videos are stored in the photos folder of your device.

**NOTE: YOU MUST ALLOW THE APP TO ACCESS TO YOUR PHOTOS FOLDER WHEN INSTALLING THE APP. IF YOU DO NOT THEN VIDEOS WILL NOT BE SAVED.**

## **AUDIO RECORDING**

Upon pressing “RECORD” for the first time the app will ask you if you wish to record audio. If you do, then push “YES”. The app will then ask to have access to your microphone, click “YES”. You are now recording audio for the entire duration of the video recording.

*Note: You cannot turn audio recording off and on during inspection. You will need to start a new recording to change.*

## **SAVING A RECORDING**

To save a recording simply press the “STOP” button. You MUST wait until the application has successfully saved the file to your device. The app will prompt you when this has been completed. Failure to wait until the app has saved the file will result in the recording being lost. Similarly, selecting another app or maximizing a phone call during recording will close the app down and cease recording prior to being saved.

## **TURNING ON AND LOCATING THE SONDE**

The 512hz locating sonde can be turned on by pressing the yellow multi-function button for 5 seconds. Use any brand of 512hz locator to find the sonde when underground. To turn the sonde off again press the yellow multi-function button for 5 seconds. Sondes are locatable up to 15ft. underground dependent upon thickness of concrete and presence of steel/cast iron pipe.

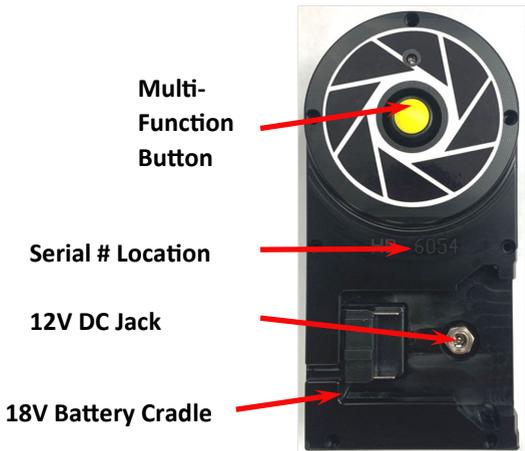
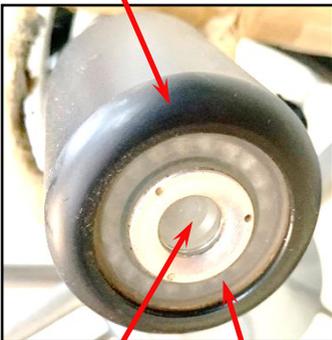
## **FOOTAGE COUNTER**

The yellow multi-function button on the hub controls the footage counter position on the screen as well as resets the footage counter. Press the yellow multi-function button once and the screen position moves. Press the yellow multi-function button for 3 seconds and the footage counter will be reset to 0ft/0m.

# FEATURE IDENTIFICATION



Plastic Skid/Sleeve



## INSPECTION PROCEDURE

Skids or sleeves should ALWAYS be used to protect the camera head. Depending on the size of the pipe you are inspecting, you may need to use a roller-skid (sold separately) so that the camera is centered or off the floor of the drain.

Under normal operating situations, the camera is used with a slimmer protective skid for drains under 4" in diameter or a larger grooved skid sleeve in 4" drains and larger.

1. Slowly push the camera into the pipe and negotiate the bends in the pipe. Push carefully to avoid kinking the push rod.
2. Take note during the inspection of any possible hazards that may entangle or damage the camera on entry or retrieval.
3. Let the camera work its way around the corner naturally. Care should be taken not to butt the nose of the camera against obstructions with force.
4. If resistance is encountered at any point, and there is no visible signs of blockage, turning the push rod or pulling the camera back and forth can help to get further down the drain.
5. Attempting to push the camera into areas it will not go may result in a kinked pushrod.

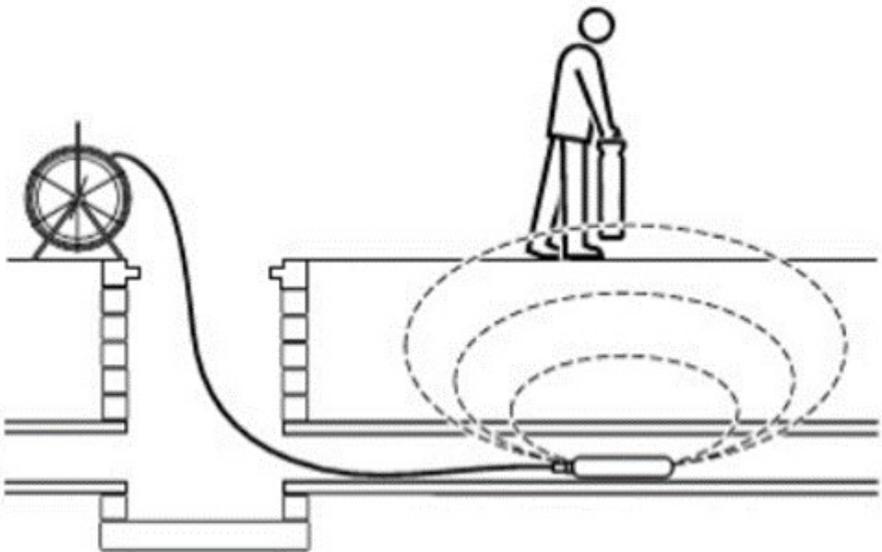
6. Upon completion of the inspection and retrieval of the camera, it is recommended that the user clean the push rod before spooling back onto the reel.
7. **NEVER** use the camera to unclog a drain or clear debris in the pipe. Doing so can cause damage to the camera head or lens.
8. **NEVER** force the camera down a pipe as this may cause a kinked push rod which will require a repair.
9. **NEVER** use a pressure washer to clean any part of the camera system. High pressure water can cause damage to electronic parts.

## LOCATING THE 512 Hz SONDE

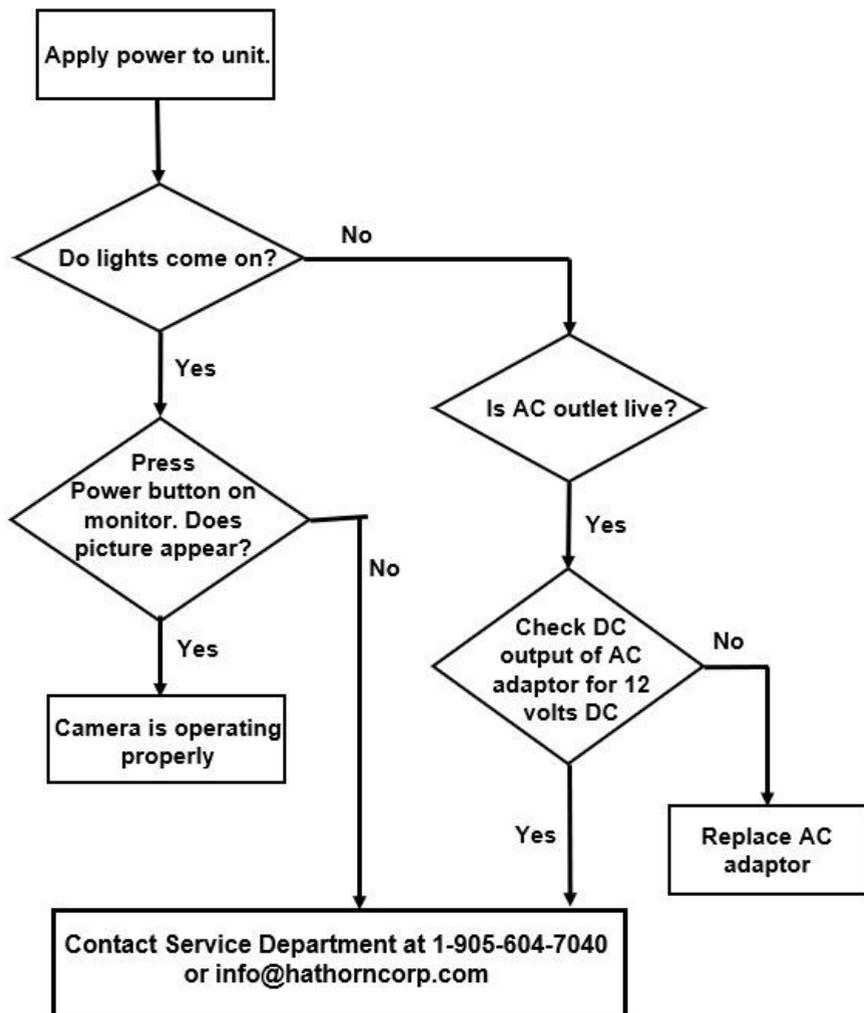
Hathorn cameras are equipped with a 512Hz sonde. To turn it on/off press down the “yellow button” on the hub for 5 seconds. You should see a small icon appear next to the footage counter on our mobile device screen.

Once the sonde is on and the camera in the pipe, hold the locator vertical directly over the pipe, face 90 degrees to the direction of the pipe. Adjust the locator sensitivity so the bar graph reads between 60% and 80%.

1. Approach the peak of the signal working perpendicular to the pipe. Move the locator backwards and forwards and stop when the bar graph indicates a Peak. Turn down the sensitivity and repeat to find the exact location and depth.
2. Most locators will automatically display the depth of a located sonde providing the locator is correctly oriented and positioned above the sonde.



# TROUBLESHOOTING



## **MAINTENANCE**

### **Inspection Camera**

After every use, the camera should be cleaned and checked for possible damage. External scuffing of the camera head skid is normal and of no concern. The camera “eye” is made of sapphire glass and should be cleaned with a soft, damp cloth. Grease, dirt or scratches will affect the quality of the video and if the lens is badly scratched it should be replaced.

### **LED Light Replacement**

The camera heads use LED lights and these cannot be replaced by the operator. If replacement is necessary, the camera should be returned to the factory.

### **Reel and Cable Assembly Maintenance**

The reel and cable assembly should be kept clean from dirt, slime, grit, etc. When winding the cable back onto the reel after an inspection, it is good practice to use a clean cloth to wipe off any debris.

## **WARNING**

**NEVER USE A POWER WASHER TO CLEAN THIS EQUIPMENT. PRESSURIZED WATER MAY GET INTO UNSEALED AREAS SUCH AS THE REEL HUB ASSEMBLY AND SLIP RING HOUSING CAUSING DAMAGE AND VOIDING WARRANTY.**

## **REPAIR FACILITIES - USA**

Repairs, warranty or otherwise, returned to Hathorn must be submitted with a “**Return Maintenance Authorization.**” For “**RMAs**” please contact:

### **Hathorn USA**

**Address:** 739 North Wilson Road, Columbus, OH, 43204

**Phone:** 1-855-863-9226 **FAX:** 1-905-604-3400

**Email:** [usaservice@hathorncorp.com](mailto:usaservice@hathorncorp.com)

**Website:** [www.hathorncorp.com](http://www.hathorncorp.com)

### **Kaiser Premier USA – Mobile Repairs South West**

**Address:** 6108 Wild Fox Court, Elk Grove, CA 95757

**Phone:** 1-916-995-2743

**Email:** [eric.montgomery@kaiserpremier.com](mailto:eric.montgomery@kaiserpremier.com)

**Website:** [www.kaiserpremier.com](http://www.kaiserpremier.com)

### **Utility Equipment Technology Ltd.**

**Address:** 382 Stevens Rd., Rockwall, TX 75032

**Phone:** 1-972-771-8958 **FAX:** 1-972-772-8195

**Email:** [utilityequipment@gmail.com](mailto:utilityequipment@gmail.com)

**Website:** [www.utilityequipmenttechnology.com](http://www.utilityequipmenttechnology.com)

### **Dynamic Repairs**

**Address:** 40 Arnot St., Unit 20, Lodi, NJ 07644

**Phone:** 1-973-478-0893 **FAX:** 1-973-478-0895

**Email:** [dynamiccablerepairs@yahoo.com](mailto:dynamiccablerepairs@yahoo.com)

**Website:** [www.dynamicrepairs.net](http://www.dynamicrepairs.net)

### **Visual Imaging Resources**

**Address:** 12600 Newburgh Rd, Livonia, MI 48150

**Phone:** 734-744-5557

**email:** [antoine@visualimagingresources.com](mailto:antoine@visualimagingresources.com)

**Website:** [www.visualimagingresources.com](http://www.visualimagingresources.com)

## **REPAIR FACILITIES - CANADA**

Repairs, warranty or otherwise, returned to Hathorn must be submitted with a “**Return Maintenance Authorization.**” For “**RMAs**” please contact:

### **Hathorn Canada - Eastern Canada**

**Address:** 255 Shields Court, Unit C, Markham, ON L3R 8V2

**Phone:** 1-905-604-7040 **FAX:** 1-905-604-3400

**Email:** [service@hathorncorp.com](mailto:service@hathorncorp.com)

**Website:** [www.hathorncorp.com](http://www.hathorncorp.com)

### **The Drain Camera Shop – British Columbia**

**Address:** PO Box 102-B, Mill Bay, BC V0R 2P0

**Phone:** 1-250-514-5976

**Email:** [info@thedraincamerashop.com](mailto:info@thedraincamerashop.com)

**Website:** [www.thedraincamerashop.com](http://www.thedraincamerashop.com)

### **FixedRight – Alberta and Saskatchewan**

**Address:** 8812-185 St. NW, Edmonton, ALB T5T 1W5

**Phone:** 1-780-690-9080

**Email:** [roger@fixedright.ca](mailto:roger@fixedright.ca)

**Website:** [www.fixedright.ca](http://www.fixedright.ca)



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