



# **HATHORN**



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



**For Safe and Effective Operation:**  
Before operation of your system, it is advised  
that this manual be read carefully.

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## **LIMITED WARRANTY**

This Limited Warranty provides one full year of coverage under our manufacturer's standard new product warranty. Hathorn warrants to the original purchaser of the product herein registered that the product shall function properly 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 properly under normal and proper usage due to defects in materials or workmanship during the period of this Limited Warranty, the manufacturer will repair, adjust or replace defective parts as it deems appropriate.

This Limited Warranty is only available to the original purchaser; it is not transferable under any circumstances.

The manufacturer's responsibility under this Limited Warranty is limited to the repair, adjustment or replacement of defective parts as determined by Hathorn in its sole discretion. Routine cleaning and normal cosmetic wear and tear are not covered by this Limited Warranty.

## **LIMITATION OF LIABILITY**

By your acceptance of this limited warranty, you agree that Hathorn shall have no liability to you for any damages resulting from delay or loss of use of the product in service or repair. Hathorn shall have no liability for general, special, incidental or consequential damages arising out of breach of this limited warranty. Hathorn assumes no responsibility for warranties either expressed or implied beyond that which is contained herein.

## **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 as above  
Non-Warranty: Freight Collect

## **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 Toll Free at: 1-800-833-1212

## **PRODUCT FEATURES**

With the Micron Wi-Fi reel you can complete inspections without the use of a traditional monitor and with the ease of a system weighing 15 pounds that runs on external 12V/18V/24V Milwaukee compatible batteries (not included) or the 12V AC/DC adapter.

The Micron Wi-Fi reel sends its own wireless Wi-Fi signal directly to multiple mobile devices or tablets in high-definition video, with the option of audio voice recording overlay, that can then be recorded and saved in your photo folder. The video can be sent back to home base or clients via text, email, airdrop, Facebook, Instagram, cloud, etc.

- 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 high compressed video saved to your phone, Easily manage video files and snapshot pictures, files can be air-dropped, texted, or emailed
- Voice recording overlay to keep you hands-free without the need to add text
- Free downloadable Wi-Fi app from Hathorn
- Wi-Fi transmission - supports Apple and Android

# USER INSTRUCTIONS

## Download the Wi-Fi App

1. Turn on the mobile device and enter APP store for either Apple or Android
2. Search “HATHORN-PRO”(or “HATHORN-PRO2” for newer Phones) software and download.
3. Install the APP software

## Setting Up the System

Connect DC power plug to the jack on the reel hub using AC/DC adapter or use an 18V (Milwaukee or equivalent) 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/PRO2 App” and click “CONNECT”. At this point you should have video on your screen.



Back

Record/  
Stop

Take  
Screen



Video

Picture

## **Video Viewing & 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.

All pictures and videos are stored in the photos folder of your device. It is recommended that users of Android devices download “VLC MEDIA PLAYER” to ensure correct video playback of recorded files.

## **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 inspection.

Note: You cannot turn audio recording off and on during inspection. You will need to disconnect Wi-Fi and reconnect.

## **Turning on and Locating the Sonde**

The 512hz locating sonde can be turned on by pressing the red button for 5 seconds. Use any brand of 512hz locator to find the sonde when underground. To turn the sonde off again press the red 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 red button on the hub controls the footage counter position on the screen as well as resets the footage counter. Press the button once and the screen position moves. Press the button for 3 seconds and the footage counter will be reset to 0ft/0m.

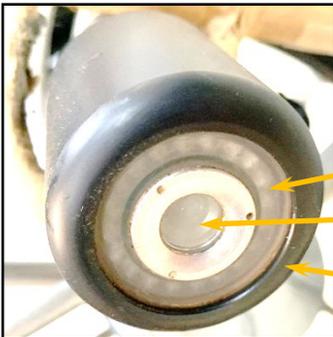
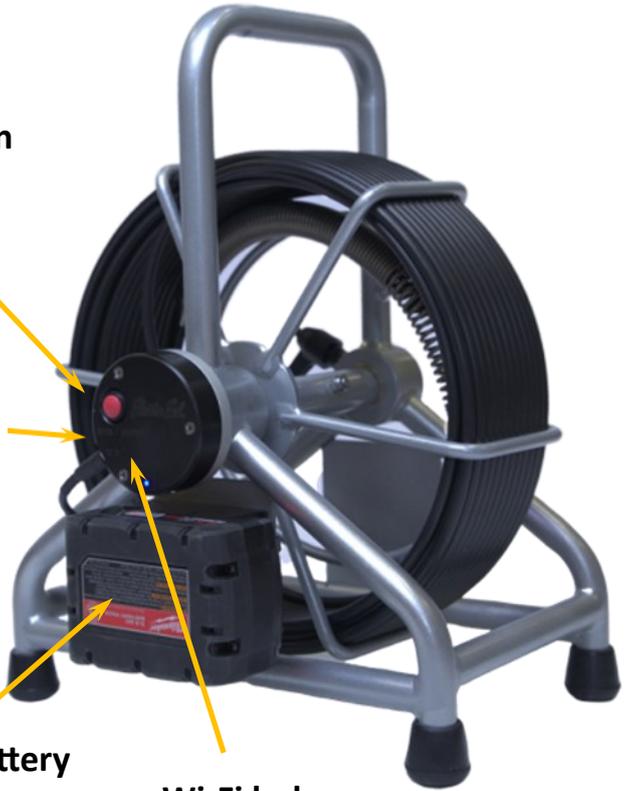
# FEATURE IDENTIFICATION

**Multi-function  
red button**

**Battery or  
AC/DC  
power jack**

**18V battery  
cradle**

**Wi-Fi hub**



**LED Lights**

**Sapphire Camera Lens**

**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 skid so the camera is centered or off the floor of the line. Care should be taken so the skids do not snag in the line.

Under normal operating situations, the camera is used with a smaller protective sleeve in lines under 4" in diameter or a larger finned sleeve in 4" lines and larger.

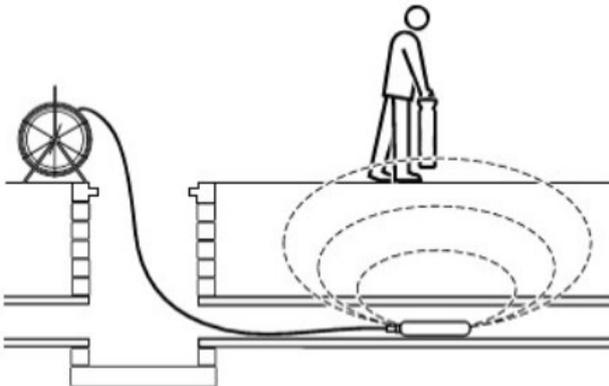
1. Slowly push the camera into the pipe and negotiate the camera into position to feed down the pipe making sure the flex neck does not kink or double back on itself.
2. Push the camera slowly and carefully during the inspection taking note of the pipe condition for possible hazards that may entangle or damage the camera on entry or retrieval.
3. When negotiating a corner, care should be taken not to butt the nose of the camera against the sidewall with any force. It would be better to let the camera "work" its way around the corner. If resistance is encountered when turning the corner and there is no visible signs of blockage, turning the push rod or pulling the camera back and forth sometimes helps.
4. Should resistance become extreme, or the camera get entangled or stuck, slowly push it back and forth to free it. Sometimes turning the push rod may also help. If the camera is visible, you may be able to free it with your hand or some other means.

5. Upon completion of the inspection and retrieval of the camera, it may be necessary to ‘manipulate’ the camera around the initial bend (clean out) in the pipe with a pole or other device if required.
6. **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.
7. **NEVER** force the camera down a pipe as this may cause a kinked cable which will require expensive repairs.
8. **NEVER** use a pressure washer to clean any part of the system. High pressure water can cause degradation of the electronic parts causing damage.
9. **NEVER** unspool all of the rod from a reel. Always leave a few turns of rod on the reel to aid with re-spooling.

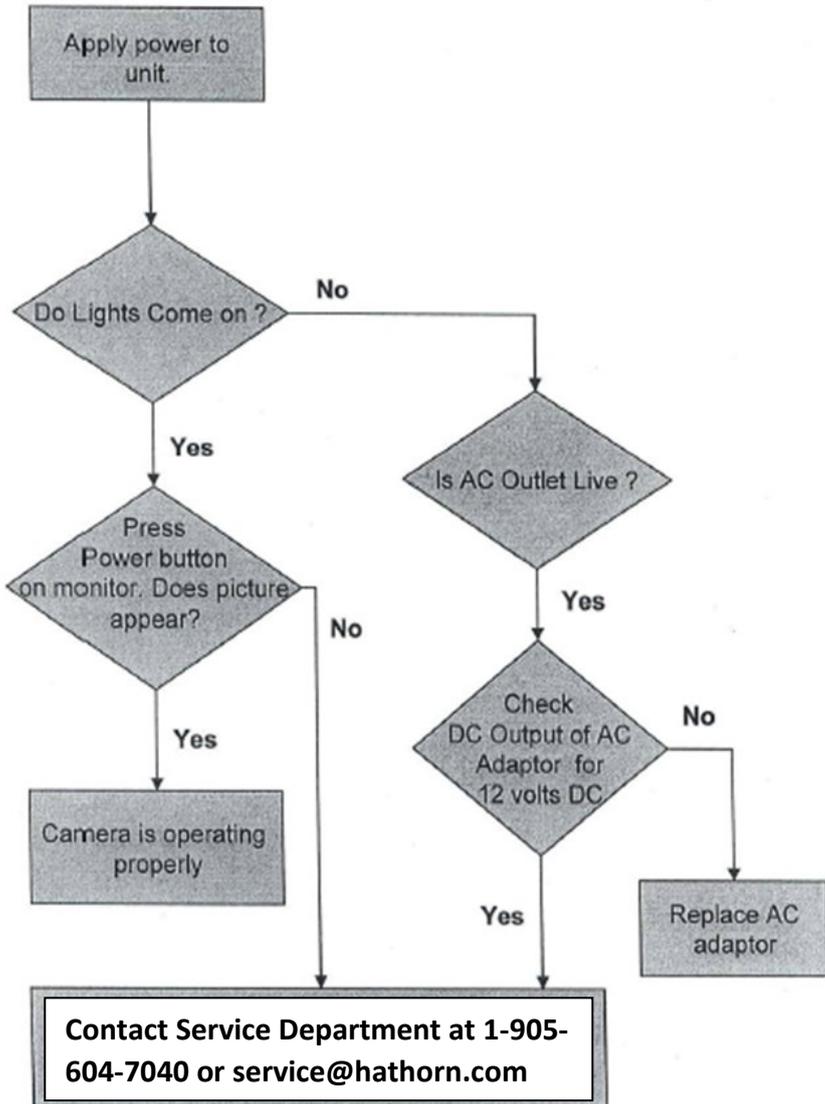
## LOCATING THE 512 Hz SONDE

Insert the sonde in the drain and locate it while it is still just in view at the drain or duct entrance. Hold the locator vertical directly over the sonde with the antenna in line with the sonde. Adjust the locator sensitivity so the bar graph reads between 60% and 80%. Push the sonde along the pipe to the desired area.

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.
2. Push the camera 4-6 ft. further, pinpoint, and mark the position. Repeat this pinpoint procedure at similar intervals along the line of the drain or duct until the survey is completed.
3. Most locators will automatically display the depth of a located sonde providing the locator is correctly oriented and positioned above the sonde.



# TROUBLESHOOTING



If a problem not shown on this chart is found please contact a Hathorn service center.

## MAINTENANCE

**Inspection Camera** - After every use, the camera should be cleaned and checked for possible damage. External scuffing of the camera case is normal and should be of no concern. The camera view port is made of sapphire 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 lighting and cannot be replaced by the operator. These lights use very little power and unless physically damaged or extreme voltage is applied to them, should last indefinitely. 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 “**RMA**s” please contact:

### **Reliable Drain Camera Repairs Ltd.**

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

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

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

**Website:** [www.sewercamerarepairs.com](http://www.sewercamerarepairs.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:** [dynamicablerepairs@yahoo.com](mailto:dynamicablerepairs@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)

**AZ Locators**

**Address:** 13041 N 35th Ave c6, Phoenix, AZ 85029

**Phone:** 602-375-5337

**email:** [info@azlocators.com](mailto:info@azlocators.com)

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

**REPAIR FACILITIES - CANADA**

**Hathorn Corporation - Eastern Canada**

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

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

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

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

**The Drain Camera Shop – Western Canada**

**Address:** 780 Kilmalu Road, Mill Bay, BC V0R 2P1

**Phone:** 1-888-913-3419

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

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



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