



HERON INSTRUMENTS INC.

dipper-See EXAMINER

Vertical Downhole Inspection Camera

Operating and Maintenance Instructions

Please visit our www.heroninstruments.com for more information on the complete Heron product line.

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HERON INSTRUMENTS INC.

- HERON ALSO MANUFACTURES:
- Water Level Meters
 - Data Loggers
 - Interface Meters
 - Conductivity Meters
 - Temperature Meters
 - Well Casing Indicators
 - Well Depth Indicators
 - Tag Lines

(Figure #1 DVR Operating Instructions)

IR remote control



Buttons	Functions
	Up/volume up(during playback)
	Down/volume down(during playback)
	Left/fast backward(during playback)
	Right/fast forward(during playback)
OK	Set/record(during playback)
MENU	Menu
P/P	Play/pause/delete files
STOP	Stop
ESC	Return to last menu/playback

Use Remote Control to Operate DVR

- Use the ▲/▼ buttons to select options to be adjusted.
- To set up recording, select "MENU" button - set up all parameters.
- Press "OK" to set selection.
- Press "ESC" to return to last menu or exit preview mode.
- NOTE: DVR MUST BE IN NTSC MODE.
- After last item is set-up, all data will be saved and screen will return to preview mode.
- "OK" will start/stop recording.
- Select "PLAY" on remote to enter playback mode.
- "OK" will start and/or stop playback.

DVR and Other Accessories

- Make sure unit is off.
- Insert SD card into DVR.
- Make sure wires are connected properly into DVR.
WARNING: Wrong wire placement will damage the unit.
- Remove cap from connector on back of frame. DO NOT lose the cap, this protects the connector from moisture intrusion.
- Connect DVR to **dipper-See EXAMINER**:
 - Line up white dot on DVR male connector to the top of the connector on monitor housing.
 - Line up pins and tighten the connectors to provide a water tight seal.
 - Fasten DVR to nose bridge on the back of the monitor housing with the supplied Velcro.
- Push POWER button on.
- Push MODE button to activate DVR. The red LED light will be on if DVR is activated. If the viewing screen is blue, check all connections.
 - Record status will flash while recording, bottom left corner.
 - Record time is located top right corner of screen.
 - Date & time is located bottom right hand of screen, adjust information with remote control.

For full DVR instructions, refer to manufacturer's manual found at:

www.heroninstruments.com/products/vertical-downhole-inspection-cameras/dipper-see-examiner

 Download Manuals

dipper-See EXAMINER Manual

DVR User Manual 



Operating and Maintenance Instructions Inside



dipper-See EXAMINER Vertical Camera Instructions

General Care of the dipper-See EXAMINER

The dipper-See EXAMINER is a robust and cost effective vertical downhole inspection camera. The dipper-See EXAMINER will provide years of reliable service when these recommendations are followed:

- Avoid sharp edged casing, use the tape guide on the unit to prevent damage to the tape.
- Take care to avoid tape becoming entangled with other equipment.
- Neatly rewind and clean the tape after each use. Refer to: Cleaning the dipper-See EXAMINER

DO NOT open monitor housing; warranty will be void.

DO NOT allow the tape to "freefall" down the well, it may become caught in other equipment or damage the lens.

DO NOT clean the lens with any alcohol based product.

Warranty is conditional upon adherence to these guidelines.

Equipment Check

The dipper-See EXAMINER operates in two functions: Function one is for real-time downhole viewing. Function two, with the **MODE** button pressed (LED light on), records video and audio on the external DVR.

Before taking the unit into the field, carry out these simple tests:

- Make sure both batteries are fully charged.
- Connect battery to dipper-See EXAMINER.
- Check the condition of the camera probe:
 - Lens is clean
 - Connections are tight
 - No cracks in lens
 - No water in lens
- Test the dipper-See EXAMINER by turning the unit on.
- Ensure image is displaying properly (image will take up to 5 seconds to appear).
- If DVR is not being used, make sure MODE button is not pressed.

Use in the Field

Familiarize yourself with all of the functions of the dipper-See EXAMINER before taking the unit out in the field.

- To use centralizer - large clip should be attached to the camera probe and the small clip to the tape. Adjust the width by repositioning the clip on the tape (**DO NOT** slide the clip up and down on the tape).



- To avoid damaging the tape on the side of the casing, hang the dipper-See EXAMINER on the casing (1) and run the tape over the guide on the frame leg (2). If you cannot hang the unit, drape a soft cloth over the edge of the casing, guide the tape down the center of the well away from the side.

- If using DVR, connect to unit (Use Operating Instructions provided with DVR) and push MODE button.
- Turn on the monitor by pressing the Power button.
- For video voice over, insert microphone to monitor house (bottom)
- Adjust the adjustable positioning arm to view the HD display screen at different angles or lighting conditions, or use the provided Monitor Visor.
- Lower the camera probe.
- When camera probe hits water, shake camera to remove bubbles.
- Take depth measurement from the tape markings every meter or foot. Indicate findings through the audio attachment (microphone) or manually note the information.
- When rewinding the tape, use a clean dry cloth to remove as much water and debris from the tape and camera probe as possible.

Cleaning the dipper-See EXAMINER

Always clean the dipper-See EXAMINER after use in the field to maintain optimal performance and extend the life of the unit.

Keep monitor and camera probe clean with cloth provided. The dipper-See EXAMINER may be cleaned with mild household dishwashing detergent (or Alconox) and rinsed with water.

IMPORTANT: Remove battery before cleaning, MAKE SURE DVR cap is closed.

DO NOT USE: Alcohol or Chlorine or other harsh cleaners that may damage the lens and tape.

Please note that the monitor is rated IP65 and should be covered during wet or inclement weather and protected against direct exposure to water projection (spraying).

DO NOT remove camera probe for cleaning.

Troubleshooting the dipper-See EXAMINER

Q. Why won't the monitor turn on when POWER button is pushed?

A. Make sure the battery is fully charged and connected.

Q. Why does the monitor have a blue screen?

A. Make sure probe is attached - check all connections.

A. Make sure the **MODE** function is not on. If on, press **MODE** button to turn off.

Q. How do I start the DVR?

A. Refer to DVR Operating Instructions (Figure #1).

Please go to www.heroninstruments.com for more FAQ.

Contact Heron Instruments or your Heron Distributor if you cannot isolate the problem.

Warranty (2 Year)

Heron Instruments Inc. warrants to repair or replace any defective equipment or part upon inspection by a **Heron** service technician. Warranty will be determined to our satisfaction to have a defect in workmanship or original material. The customer is responsible for all shipping fees to return the item to **Heron**.

This warranty shall not apply to damage of equipment caused by improper installation, usage, storage, alteration or inadequate care.

In no event shall **Heron** be held liable for any direct, indirect or consequential damages, abuse, acts of third parties (rental equipment), environmental conditions or expenses which may arise in connection with such defective equipment.

To prevent Electro Static Discharge from damaging the unit, please discharge your body by touching a grounded surface before touching the camera probe or DVR. When handling the camera use the black connector as the point of contact.



Heron Instruments Warranty coverage does not extend to the following:

- Tape
- Battery or charger used with the product
- Accessories provided with product
- Products used as rental equipment
- Products contaminated by material which are known to be hazardous and have rendered the unit unserviceable
- Parts failure due to neglect in cleaning or servicing
- Failure of parts caused by misuse

For service information:

Visit www.heroninstruments.com
Email service@heroninstruments.com
Call 1-800-331-2032 or 905-628-4999

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