

# Pipe Inspection Crawler

## General information about CCTV Mainline Sewer Crawler Camera Pan & Tilt Mainline Crawler Pipe Inspection Crawler AD-R2044S:

- ✓ AD-R2044S Pipe Crawler is a portable all-in-one device for inspecting pipelines with diameters from 150 to 600 mm (6"-24").
- ✓ It features dependable, sturdy, highly adjustable design offering users ultimate inspection experience and true portability.
- ✓ It is one of the most sophisticated and efficient, yet easy-to-use and affordable devices in the market.
- ✓ The pipe inspection robot includes several modules that are easy to transport and assemble: pan-tilt-zoom camera, insertion cable, controller, cable reel and crawler.



## Other feature:

1-Optional accessories are available on request. The pan-tilt-zoom camera with continuous rotation is equipped with a 0.01 lux sensitive, high-definition CCD anti-fogging camera and laser scale, provides high-quality well-rounded image of pipeline interior.

2-The camera is with pan 360degree rotation, tilt 180 degree rotation, 120 times zoom, auto focus, embedded LED light, pressure sensor and laser scale for crack width measurement.

3-The crawler is with 2\*20 DC motor and adjustable speed, and can climb about 50 degree according to different pipe status.

4-The crawler also with the inclination that can measure scope  $\pm 45$  degree, pressure indication for pressure prompt and rear camera inspecting crawler backwards.

5-The controller is with 8inch color LCD screen and Win7 system, the screen can see the defects inside the pipes clearly under sunlight.

6-It is built-in 128G SSD hard disk and record image in JPG, video in AVI format. The controller controls the crawlers speed, direction, light intensity, camera focus, rotation, camera movement, clutch control, auxiliary light controls.

7-The controller is with keyboard for text writing. The system also be able to communicate with mobile, you can control the whole system by mobile.

8-The pipe video software inside the system can help you review the info you want, such as data, video, inclination, pressure and camera status.

9-The automatic cable drum is with 200m standard cable, and 300m optional. Manual cable drum optional.



## Technical Specifications of the Machine:

### PTZ camera

- This camera is equipped with a lamp ring which is powered independently of the camera.
- Anti-fogging camera lens
- The pan, tilt, zoom camera can be tilted in both directions. Vertical:  $\pm 90^\circ$ , horizontal:  $\pm 360^\circ$
- High resolution CCD camera, light sensitivity 0.01LUX(star), 0LUX (sensed infrared)
- 120 times zooming: 10:1 optical zoom, 12:1 digital zoom
- Auto focusing, manual adjustable is available
- Resolution: NTSC: 530 (TV Lines)
- 360 degree rotation, one key center function ,laser measurement gauge

### Crawler:

- Suitable pipe diameter: 100mm~600mm
- Drive: two\* 20 DC motor
- Inclination: measurement scope  $\pm 45$  degree, precision 0.1 degree
- Speed: adjustable speed, max. 32m/min
- Direction: forward, backward, left, right
- Pressure indication: green light(1.2-1.5 bar, normal pressure), red light abnormal light.
- Climbing: max. climb degree about  $50^\circ$  according to different pipe status
- Rear sight camera: integrate camera and light, inspect crawler backwards and cable retrieving
- Water proof: to IP68
- Working temperature:  $-10^\circ\text{C}\sim 50^\circ\text{C}$



### **Controller:**

- Controls the crawlers speed, direction, light intensity, camera focus, rotation,
- camera movement, clutch control, auxiliary light controls.
- Displays: Date, time, inclination, data, with text editing facility.
- 8inch color LCD screen and Win7 system
- built-in 128G SSD hard disk and record image in JPG, video in AVI format
- keyboard for text writing
- AC 110V, 60Hz, NTSC/PAL modes
- Remote control app. Available.
- The pipe video software inside the system can help you review the info you want, such as data, video, inclination, pressure and camera status.
- Weight: 18kg,
- Dimension: 510mm\*485mm\*295mm
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### **Auto cable reel:**

- Automatic cable drum, three modes to allow for the drum to wind up when the Crawler is not moving and vice versa, mode 3: cable retrieving only Standard cable length 200m, 300m is available.
- 6mm, multi-core cable, with Polyurethane sleeve and Kevlar reinforced.
- Adjustable handle for ease of transportation
- Weight: Approx. 50kg

### **4"wheel set (4pcs) :**

- ID : 135mm
- For 150-600mm pipe

### **3"wheel set (6pcs) :**

- ID : 86mm
- For 150-300mm pipe

### **Toos and Accessories(set):**

- Including wheels, manhole hook, special rope, guide pulley, etc.

