

flexiprobe PT Addendum

OPERATION & MAINTENANCE MANUAL
P/N DSA0000-MAN, Rev. 04.03.26





We're Always Here To Help

Thank you for purchasing our CCTV pipeline inspection equipment! We truly appreciate your business and are confident that our products will meet your pipeline inspection needs. Should you require further assistance, please do not hesitate to reach out to us through one of the weblinks listed below. Your satisfaction is our priority, and we are here to support you every step of the way!

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2 EQUIPMENT OVERVIEW

PT CONFIGURATION SYSTEM



PT CONFIGURATION SYSTEM

The system consists of the following equipment:

- 1** **(10/RP3400-10-US) Control Unit with Text Writing, Observation Coding, Digital Recording and Industrial Grade Monitor in an Injection Molded Enclosure:**
 - Alerts for WiFi and battery status
 - High resolution 12.1" / 307mm screen
 - IP55 ingress protection open and closed
 - Regional keyboard layouts available
 - Dedicated buttons for shortcuts to commonly used functions
 - Fingertip control of drum / crawler / camera / light with joysticks and control buttons
 - Connectivity: USB, HDMI, WiFi, ethernet, audio and analog video in

- 2** **(CH301-1) Stainless Steel Coiler:**
 - The coiler assembly stores up to 500 feet of .236" fiberglass push rod and is equipped with 10" wheels for easy portability.
 - Heavy 18 gauge and corrosion-resistant Stainless Steel construction
 - Large 10" durable wheels for portability and a balanced footprint for stability
 - Quick-Connect allows Control Unit mounting with 3 axes adjustability
 - Adjustable coiler brake
 - Integral distance sensor

- 3** **(CH346-20PE) 200' of .517" Push Cable (.236" fiberglass rod) and HDPE Jacket Push Cable:**
 - The push cable transmits power to the self-leveling color camera or PT camera head and also carries the video signal back to the PCU.
 - Push Cable with durable HDPE jacket and advanced fiberglass rod
 - Features a disconnect termination for Camera Head interchangeability

- 4** **(SR320 SERIES) Optional Self-Leveling Color Camera (not shown):**
 - The mini-camera provides live video during sewer pipe inspections. It attaches to the push cable by utilizing a flexible leader spring (CH342) with a disconnect termination.
 - 1 ½" diameter Stainless Steel camera head designed for 2" to 12" pipelines
 - 512 Hz integral sonde
 - 12 high intensity LED's

- 5** **(UC300) Optional Micro Pan & Tilt Camera is designed to:**
 - Navigate through multiple wyes and 45 and 90 degree bends / sweeps with the integrated directional rod
 - Provides live video during sewer pipe inspections

The Micro P&T Camera includes:

 - Continuous 360-degree Pan & Tilt rotation
 - White LED variable intensity lighting
 - Scratch-resistant sapphire window
 - Built-in multi-frequency sonde transmitter (512 Hz or 8 kHz)
 - Detachable steering wand to navigate through multiple wyes
 - Built-in lens wiper
 - Self-leveling camera head

3 SET-UP & INSTALLATION

PT LARGE CONFIGURATION - OPTIONAL EQUIPMENT

DESCRIPTION	PART NUMBER
Accessory bag for storage, attaches to coiler frame	CH061
Large pipe skid for 6-12" pipe operation for SR320 and UC300 configurations	CH906
Line-Trace Post Terminal for Line Locating	CH901
100 ft. push cable	CH346-10PE
150 ft. push cable	CH346-20PE
250 ft. push cable	CH346-25PE
300 ft. push cable	CH346-30PE
350 ft. push cable	CH346-35PE
400 ft push cable	CH346-40PE
500 ft push cable	CH346-50PE
Camera ball for SR camera	LM299

OPTIONAL EQUIPMENT



INSTALLING THE MICRO PAN & TILT CAMERA -



NOTE: If the electrical contacts on the camera (PAL P/N UC300-2, NTSC P/N UC300-3) or spring assembly (CH341) are dirty, clean them with alcohol, let dry, and apply a small amount of DeoxIT (CS569). If the O-ring on the camera is dry, apply a thin film of O-ring lube (CS390) to the O-ring.

- 1** Align the pin on the camera to the mating hole on the spring assembly and insert the camera into the spring assembly. Using a stubby 3/32" Allen Wrench (HW2908), route the (6) supplied screws (103089) through the (6) holes located at the end of the spring assembly and tighten until securely seated on the camera.

NOTE: If the electrical contacts on the push cable (CH346-__PE) or spring assembly (CH341) are dirty, clean them with alcohol, let dry, and apply a small amount of DeoxIT (CS569). If the O-ring on the push cable connector is dry, apply a thin film of O-ring lube (CS390) to the O-ring.

- 2** Align the pin on the push cable with the mating hole on the spring assembly and insert the push cable into the spring assembly. Turn the knurled locknut on the spring assembly until the spring assembly is securely seated on the push cable.

3 SET-UP & INSTALLATION

INSTALLING THE SELF-UPRIGHT CAMERA



NOTE: If the electrical contacts on the camera (SR320 SERIES) or spring assembly (CH342) are dirty, clean them with alcohol, let dry, and apply a small amount of DeoxIT (CS569). If the O-ring on the camera is dry, apply a thin film of O-ring lube (CS390) to the O-ring.

- 1 Screw the camera into the spring assembly until it is securely seated.

NOTE: If the electrical contacts on the push cable (CH346-__PE) or spring assembly (CH342) are dirty, clean them with alcohol, let dry, and apply a small amount of DeoxIT (CS569). If the O-ring on the push cable connector is dry, apply a thin film of O-ring lube (CS390) to the O-ring.

- 2 Align the pin on the push cable with the mating hole on the spring assembly and insert the push cable into the spring assembly. Turn the knurled locknut on the spring assembly until the spring assembly is securely seated on the push cable.

ADJUSTING THE CABLE GUIDE

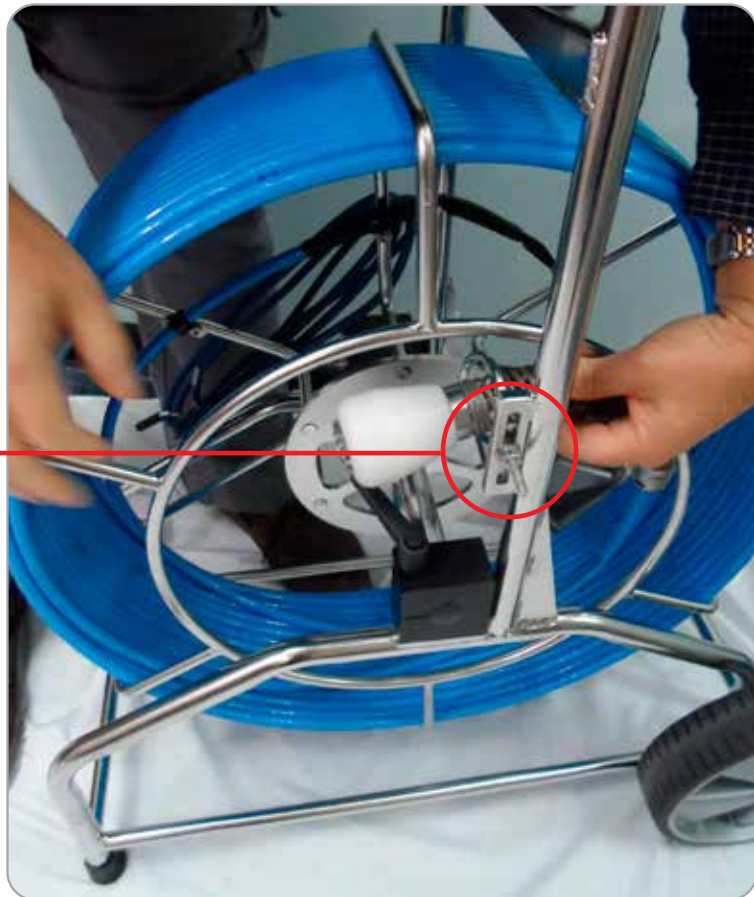
An adjustable cable guide is provided to guide the cable while being released / retrieved from the coiler.

The cable guide is set at the factory, but can be adjusted based on your specific needs.

To adjust the cable guide, loosen the bolt located on the coiler, then adjust the cable guide height up/down. Secure the bolt to hold into place.

Replacement cable guides, P/N CH006, are available, if needed.

Cable Guide, P/N CH006



3

SET-UP & INSTALLATION

INSTALLING THE ACCESSORY BAG -

An accessory bag is provided to store additional items, if needed. It also includes a convenient carry handle for portability.

To attach/remove the bag, secure the (3) velcro flaps onto the cable reel as shown and per below:

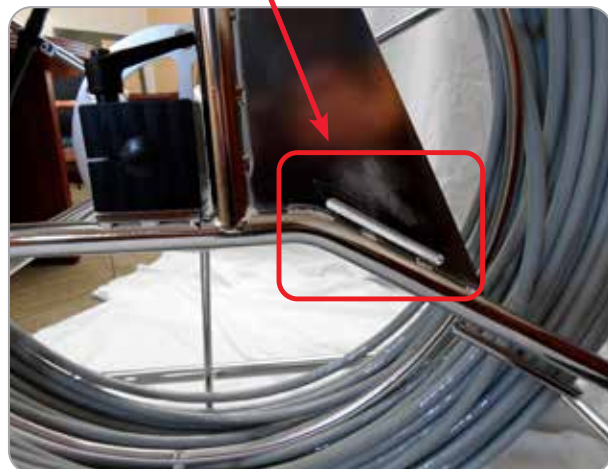
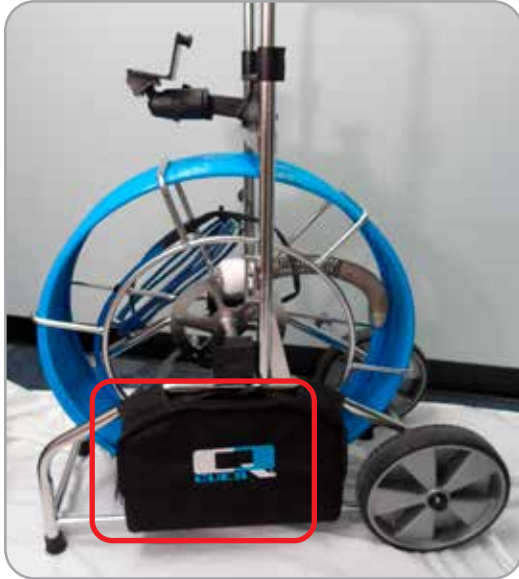
Secure the long flap at the bottom of the bag around the bottom of the coiler as shown.

Route the right velcro strap through the slot in the coiler and secure.

Then wrap the (2) smaller flaps around the coiler.

Press together to ensure good adhesion.

(3) velcro flaps located on the accessory bag





LINE TRACE

An optional line trace is available to provide a connection point for a line transmitter. It is compatible with multiple frequencies, including 128 Hz, 1 kHz, 8 Hz, and 33 kHz. Maximum 10 watts. Please contact CUES for recommended transmitter options.



BRAKE TENSION

A brake tension adjustment handle is provided to freely rotate the basket. Adjust the handle to apply more/less tension while the cable is being released /retrieved, based on your preferences. Complete clockwise rotation will lock the basket in place.

4 CAMERA CONTROLS

SR320-11 CAMERA HEAD

CAMERA FUNCTIONS

No joystick control

The camera uses a self-leveling system, ensuring the image remains upright at all times.

Sonde

Always ON at 512 Hz
(no adjustment required).

Light Control

Light Ring Intensity
Adjustable from 0% to 100%.



Camera Head and Spring End
P/N SR320-11 / CH342



How to Adjust Brightness

Press the top (Up) button to gradually increase brightness.

Press the bottom (Down) button to gradually decrease brightness.

Light intensity ranges from 0% (off) to 100% (maximum brightness).

Adjust brightness based on pipe conditions:

Lower intensity reduces glare in close or reflective surfaces.

Higher intensity improves visibility in darker or deeper areas.

Brightness changes instantly as buttons are pressed, allowing real-time adjustment during inspection.

UC300 CAMERA HEAD

CAMERA FUNCTIONS

Joystick Control

Controls pan and tilt movement.
Press the joystick once to return the camera to the Home (centered) position.

Sonde Settings

Selectable frequencies:

- 512 Hz
- 8 kHz

Light Control

Two light modes available: Camera Ligts (Spot) and Auxiliary Lights (Flood). Adjustable from 0% to 100%.



Camera Head P/N UC300



How to Adjust Brightness

Press the top (Up) button to gradually increase brightness.

Press the bottom (Down) button to gradually decrease brightness.

Press Up + Down simultaneously to toggle between lighting modes

Mode 1 Camera Lights (Spot)

Long-distance viewing

Mode 2 Auxiliary Lights (Flood)

Close-range inspection

When switching modes, brightness resets to 0%. Adjust intensity again after changing modes.

Brightness changes instantly as buttons are pressed, allowing real-time adjustment during inspection.



CUES's equipment is designed to be easy to use during day-to-day operation. However, it is powered electrically and thus must be operated with care and safety. Do not attempt to operate any CUES equipment without having thoroughly read through the appropriate operating instructions and/or been through training by authorized CUES personnel.

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