

## Pipeline Television Inspection Systems

This sewer television system is delivered complete, ready for operation. The system includes a pan & tilt camera and transporter with light head capacity from relined 6" to 24" lines. Superscript numbers correspond to item substitutions available via option packages.

### REF Portable Pathfinder System Quote

- 1 **<sup>1</sup>System Control Unit ("SCU") assembly mounted in a Hardigg-style, ATA airline-rated shipping case. Major built-in components are:**
  - 1 Non-glare 8.4" color flat screen TV monitor
  - 1 Audio speaker system
  - 1 Video recorder bypass switch
  - 1 Set of video recorder audio and video jacks
  - 1 Microphone jack
  - 1 Audio recording microphone
  - 1 Camera power selector switch, micro/mainline
  - 1 Light power selector switch, micro/mainline
  - 1 5-position lighthouse selector switch
  - 1 Lighthouse protection system with an auto reset circuit breaker and trip indicator light
  - 1 Lighthouse intensity control knob
  - 1 AC power switch
  - 1 Set of individual circuit breakers for AC power input/lighthouse power output/camera power output
  - 1 120V AC power input GFI protected plug with cord
  - 1 120V AC duplex GFI protected outlet
  - 1 Military connector for SCU to reel interconnect cable (prewired for push reel, pull reel, tractor and on-screen footage features)
  - 1 Multi-function system diagnostic test meter with concurrent volt and amp LED readout
  - 1 Storage compartment mounted in shipping case protective cover
  - 1 Expansion slot and keyboard tray position for VL5000 data display module and keyboard
  - 1 Internal digital recorder with USB output and 16GB flash drive
  
- 1 **<sup>1</sup>Aries VL5000 Video Data Display and Report Writer System with:**
  - 1 Data display control module, panel mounted
  - 1 Alphanumeric full "QWERTY" keyboard for video titling and report data input (must be built in control unit for storage safety)
  - 1 Ink jet printer, USB port, color
  
- 1 **Aries PE3410 Pathfinder series zoom pan and tilt camera w/ high intensity LED light ring and integrated self-cleaning lens wiper system, including:**
  - Pathfinder zoom pan and tilt camera w/ multi-axis continuous rotation
  - Integrated self-cleaning lens wiper system
  - 40X zoom (10X optical & 4X digital)
  - Maintenance-free forward facing true color warm white directional LED lighting modules, positioned in the arms of the camera
  - Maintenance-free true color warm white directional LED directional lighting system with for inspecting up to 36" pipelines
  - White balance optimization with (4) selectable settings

- “Starlite” light enhancement feature with (4) user selectable enhancement steps
- “One Touch Scanning” feature with (2) user selectable continuous joint scan presets
- “Quick Look” preset view positions (6) (Up, Down, Right, Left, Lat R, Lat L)
- Fast-check pressure monitoring system
- On-screen camera diagnostics functions including:
  - Camera model, serial number, software revision
  - Camera operating hours, regulated voltage value, head temperature
  - Camera internal pressure, control error recognition, LED current value
- 1 Camera/tractor storage and transport case
- 1 Camera recharge kit

**1 <sup>2</sup>Aries TR3300 Pathfinder steerable self-propelled transporter for relined 6” to 24” lines, including:**

- 1 Tractor assembly with continuous duty drive motors
- 6 3¾” rubber wheels for relined 6” lines
- 4 4¾” rubber wheels for 8”-15” sewer lines
- 4 4¾” extended hub rubber tires for 10”-18” sewer lines
- 4 5” extended hub rubber tires for 12”-24” sewer lines
- 1 Fast-check pressure monitoring system
- 1 Manual camera lifting mechanism
- 1 Integrated inclinometer system
- 1 Rear viewing camera with LED lighting
- 1 Auxiliary high power detachable light head
- 1 512 Hz detachable locating beacon
- 1 Storage and transport case
- 1 Set maintenance parts
- 2 3” carbide impregnated high traction wheels
- 2 4” extended hub carbide impregnated high traction wheels
- 2 5” extended hub carbide impregnated high traction wheels
- 4 5” double wide “dually” extended hub wheels for larger line

**1 <sup>1</sup>Device controllers, including:**

- 1 Desktop dual mode camera controller including: joystick for axial rotation and pan and tilt angle; remote focus; zoom in/out; home, diagnostics, white balance, Starlite, and preset switches
- 1 Tractor power supply and control interface box to SCU
- 1 Hand-held Pathfinder series tractor controller

**1 Pathfinder cable and reel assembly, including:**

- 1 Heavy-duty frame, drum and motor assembly with clutch and cable level wind assembly
- 1 Footage meter with local LCD footage display and encoder for footage signal to remote video data display system
- 1 Hand held reel controller with 20’ cable
- 1 Emergency hand crank arm
- 1 1000’ of lightweight low friction multi-conductor cable
- 1 Spare cable termination kit
- 1 Sealed continuous contact collector assembly, 12 slip rings minimum
- 1 Telescoping swivel cable guide roller assembly
- 1 Mounting bridge with tractor storage underneath \*\*shipped loose for local install
- 1 Drip pan with drain \*\*shipped loose for local install

1 Interconnect cable to TV system electronics

**1 Cable manhole guide system including:**

- 1 Manhole top roller assembly
- 1 Insertion and extractor pole assembly and tractor adapter
  - 3 Quick lock extension poles
- 1 Manhole bottom roller assembly and adapter hook
- 2 Quick lock extension poles
- 1 Tiger tail bottom cable guide

**2 DVD – operation / maintenance and spare parts manuals**

**1 Maintenance tool kit**

**1 Delivery of system**

**2 Days of training**

**1 One year warranty, TV system**