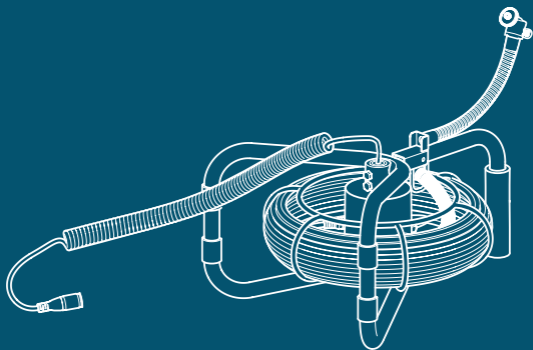


POLAR

User Manual

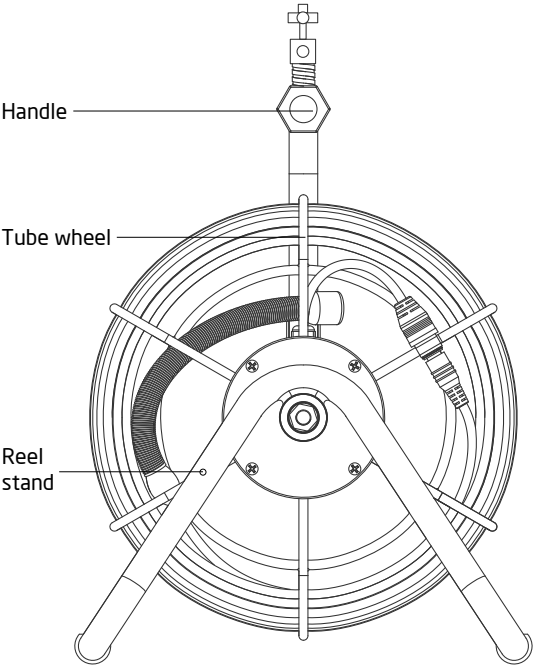


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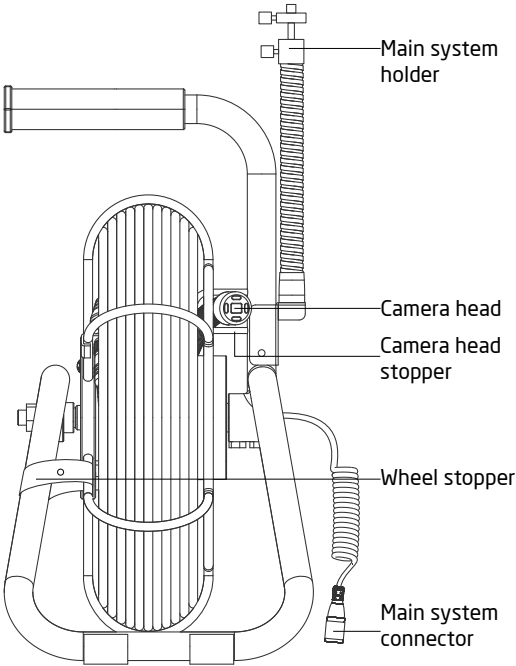
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Product Outlook

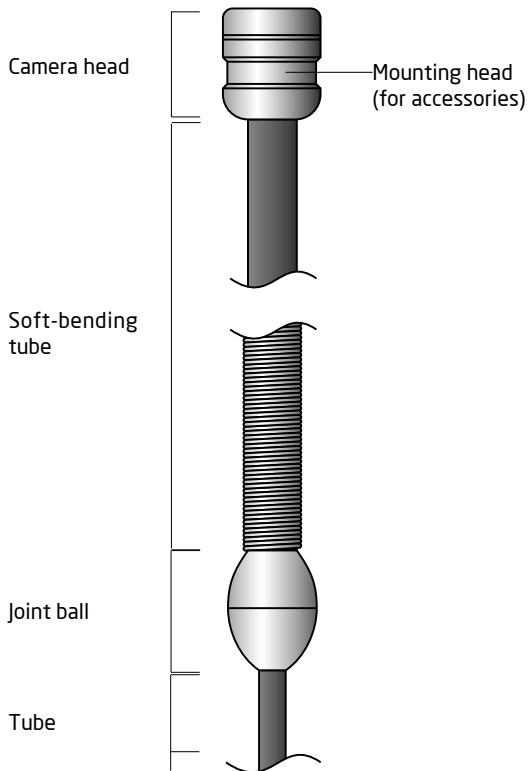
Reel



Side view



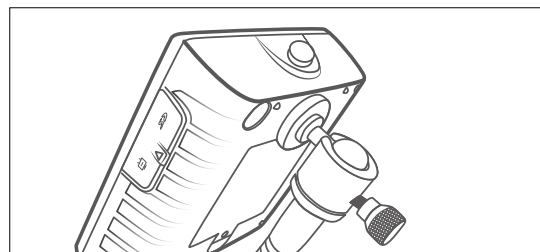
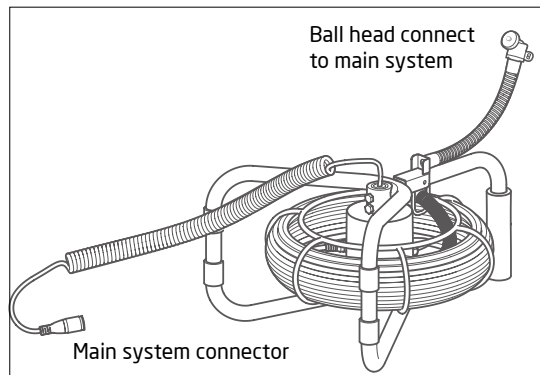
Probe



Getting Started

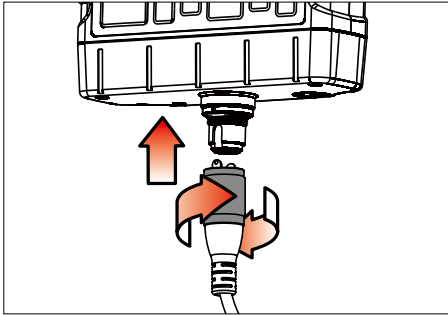
Work with ball head connection

For main systems with embedded threaded holes



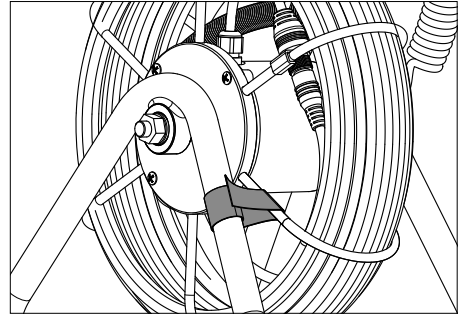
Screw the main system to the ball head tightly until fixed

Insert the host connector cable into the connector accordingly to the direction of the dot and tighten the screw nut.

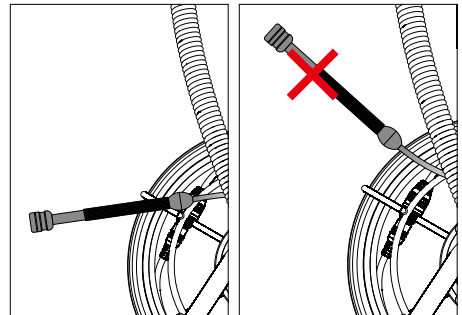


Pull Out The Tube

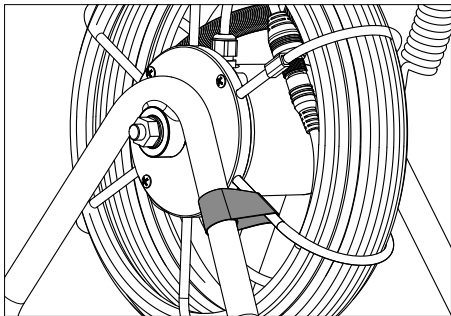
Step1: Make sure the tube wheel stopper is loosened before using.



Step2: Take out tube horizontally from camera head stopper.(Do not pull up over 45°)

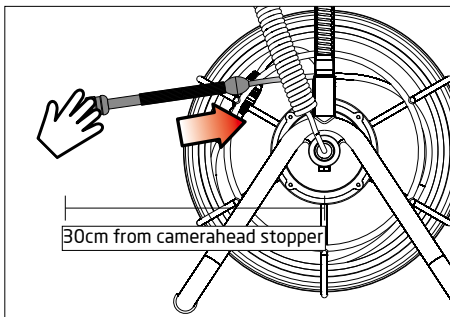


Step3: When you get the required tube length, you can fasten wheel stopper on tube wheel to avoid rolling.



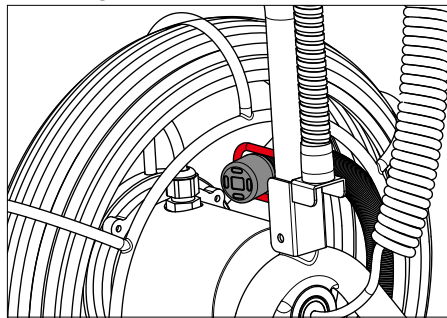
Retrieve the tube

Step1: Push tube backward and horizontally to the tube wheel within 30cm distances from camera head stopper.



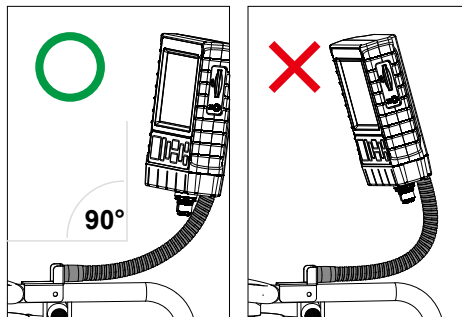
Step2: Fix camera head on camera head stopper after the tube is retrieved in the tube wheel.

Step3: Fix wheel stopper on the tube wheel to avoid rolling.



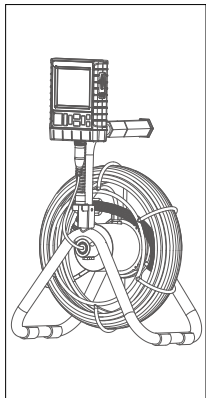
Main system holder

When you put main system on holder, you can adjust the holder for your inspection but do not bend holder over 90°

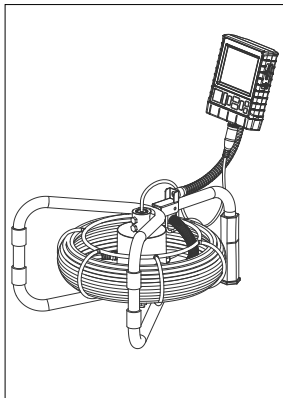


Use The Reel

Put the reel on a surface and make sure it's steadfast.



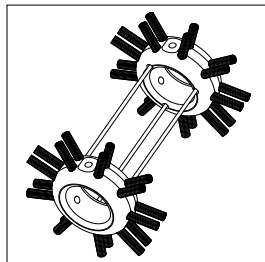
Vertical Use



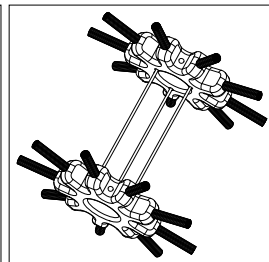
Horizontal Use

Accessories(Optional)

Brush

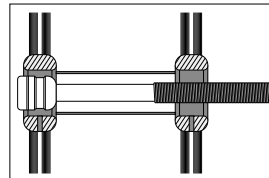
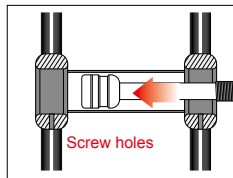


100mm

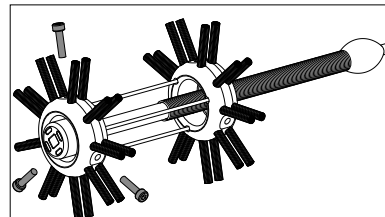


150mm

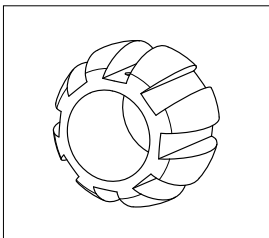
Step1: Move the Mounting ring to align with the screw holes.



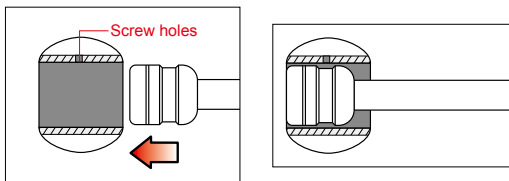
Step 2: Lock the screw.



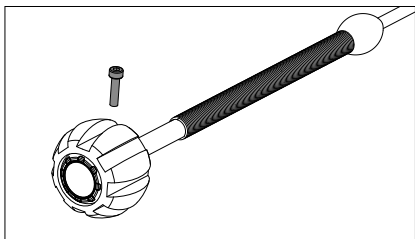
Metal ring



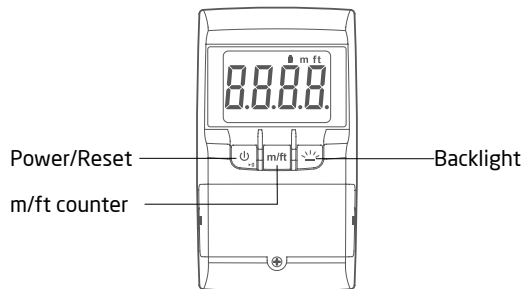
Step1: Move the Mounting ring to align with the screw holes.



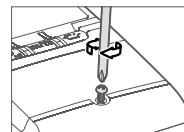
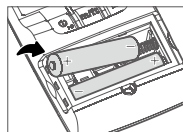
Step2: Lock the screw.



Meter

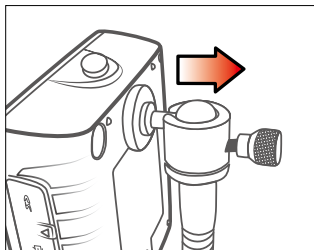


- Press ⏻ 3 secs for power on/off, 1 sec to reset.
- Press m/ft for meter/feet swith.
- Press ☀️ to turn on backlight, it will last 10 secs.
- The power will be off automatically, if it's idled for 1 hour.
- Please change battery when the screen display battery power indication "⚡": To replace battery,unscrew the cover below the buttons and change.

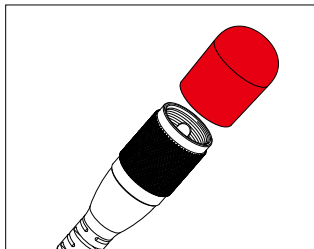


Clean

Step 1: Remove the main system from holder before cleaning, wipe dry with clean cloth.



Step 2: Cover the protector cap on the main system connector.



Step 3: Use cleaning liquid and swab provided in the cleaning kit for camera head cleaning.

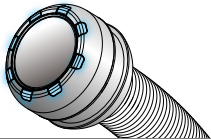
Step 4: Let the reel stand on the ground then make sure water will not outflow after rinsing.(It is better to put on the ground over 5 minutes and dry out)

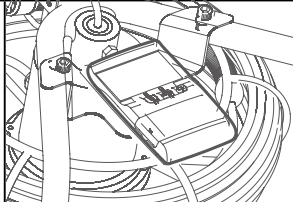



Step 5: Wipe with dry clean cloth then put in the case.

Specifications

Reel	
Reel Frame Diameter	300mm
IP Protection	IP65
Working Temperature	-10°C~60°C
Weight (Reel)	3kg
Tube	
Pipe Diameter	6mm
Length	Optional (standard 22M)
Bending Radius	R=150mm
Weight (Tube)	100g/m

Tip - 22mm	
Outlook	
Camera Diameter	22mm
Camera Length	25mm
DOF	30mm ~ 100mm
FOV	62.5° (Diagonal)
Lighting	8 LEDs (white)
Working Temperature	-10°C~60°C
Dust/Water protection	IP 68 (10M)
Applicable pipe size (mm)	Ø30mm ~ Ø100mm

Tip - 28mm	
Outlook	
Camera Diameter	28mm
Camera Length	24.3mm
DOF	10mm ~ ∞
FOV	150.8° (Diagonal)
Lighting	8 LEDs (white)
Working Temperature	-10°C~60°C
Dust/Water protection	IP 68 (10M)
Applicable pipe size (mm)	Ø40mm ~ Ø100mm

Meter	
Outlook	
Switches	 Power / Reset  m/ft counter  Backlight
Dimension	62 x 110 x 24mm
Meter counts	Forward / Rewind
Display digits	3 (1 decimal place)
Meter display	m/ft
Deviation	± 0.4m(±1.3ft)
IP protection	IP 55
Power source	2 x AAA (DC 3V)
Power capacity	≥ 90hrs

Cautions for Use

- Pay attention on taking tube out or in because the tube is the high strength structure and can be used as a push rod in pipe. If taking out the tube not carefully, it may roll out from the reel.
- Do not use this product in a fuel tank or other dangerous environment such as a gasoline or alcohol storage tank.
- Do not use any corrosive liquid for cleaning, such as alcohol.
- Do not try to disassemble this product, it might cause damage or electric shock .
- Please use only recommended components or accessories. Unapproved accessories and components may cause damages.
- Do not use the product in medical facilities, airplanes or environment with explosive atmosphere.
- The pipeline can pass through four perpendicular curves, more curves or over 90° would cause unsuccessful operations (moving forward / backward) or product damages. Damages that caused by the operations not instructed by this Manual will not be under our warranty policy.
- Camera lens cleaning : use cotton swab and small amount of cleaning naphtha.
- Whole set cleaning : rinse with water and wipe with dry cloth or dry out. Please do not jet from hose or

nozzle.

- Do not remove the SD card when capturing photos or video. This may cause data loss and damage the SD cards.
- For better video quality we recommend 80X(or above) writing speed SD cards.
- This product is designed for industrial use only. Do not use the system for human or biological inspection.
- Avoid direct exposure of sunshine for long period of time. Store the system in a cool, dry and well-ventilated place.

NOTE

