

Articulated Nimble Adaptable Trunk

ANATROLLER ARI-50™

Developed by Robotics Design Inc. CANADA

The **ANATROLLER™ ARI-50** is a mobile robot that is specialized for cleaning and inspection of air ducts. It is a highly reliable and effective robot, and its low cost provides it with exceptional value.

This robot is very user-friendly, and comes ready to deploy in minutes, as the cable is simple to connect, and video recording equipment comes pre-integrated in the robot. The single joystick robot control of the **ANATROLLER™ ARI-50** allows even users to operate this robot with ease.

This robot is highly manoeuvrable, and can climb obstacles of 1" and slopes of 45°. It connects to both an air compressor and the robot control case by a single rugged cable, making it considerably more manoeuvrable than typical dual cable robots and easier to operate and deploy.

This robot can be customized in many different ways to suit different applications or budgets. It can support a variety of accessories and add-ons, allowing it be used in any duct cleaning job from start to finish. The width of the robot is interchangeable between 5" and 3.5" as treks can be substituted for small treks allowing the **ARI-50** to clean even the smallest ducts or pipes.

This product is protected by the US Patents 6,323,615 & 6,686,717 and other international patents pending

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Description

The **ANATROLLER™ ARI-50** is a heavy-duty, modular, reliable, anti-tilting robot with a symmetrical design which allows it to continue operating after a flip-over.

ANATROLLER™ ARI-50 is one of the industrial series of the **ANATROLLER™** family, and is specialized in inspection and cleaning of HVAC ducts starting at 3.6 x 6" in diameter. This durable robot is precision-machined and constructed of aluminum and stainless steel. Weighing only 5 Kg, the robot is able to carry a payload of 20 Kg and to tow a wheeled payload of 30 Kg. This property renders it the most powerful mobile robot in the market for its size.

The **ANATROLLER™ ARI-50** can operate in severe industrial environments and can resist water, oil, and dust. The robot is able to inspect, spray, coat and brush duct interiors in round, square, and rectangular ducts.

Lighting systems are equipped with variable luminosity control. Excessive brightness and undesirable reflections on interior duct surfaces are eliminated using the white lighting system.

The robot, the control system and the accessories are stored in a rugged case, for easy transportation.

Various modular equipments can be mounted on the robot, allowing it to cover a wide range of applications.

The **ANATROLLER ARI-50** comes with an integrated digital video recorder and player with a high quality 4" color display screen.

A 30 GB Hard drive is integrated in the robot which allows for 130 hours of saved video; a USB 2.0 port on the carrying case allows users to easily transfer content from their robot to their computer.

To operate the robot, simply connect the external air compressor to the air tube and plug the case into an electric outlet and the robot is ready to work.

The air tube, control wiring and video wires are all located in one rugged cable, for easy operating and installation.



Advantages

- Symmetric compact modular design;
- Light weight, Anti-tilting robot;
- Zero-radius turn;
- Climbs obstacles of 1" height;
- Grad up to 45 degree;
- Transports payloads;
- Resists vibrations and industrial environment;
- Water resist (optional);
- Low Maintenance;
- User-friendly control unit;
- One cable for air and control;
- High quality precision machined frame;
- Integrated video player and recording;
- Remote control for the video;
- 30 GB hard drive;
- External USB storage device.

| ANATROLLER ARI-50 | | |
|--------------------|---|--------------------------------------|
| ROBOT | Length | 11.0 in |
| | Height | 5.0 in |
| | Width (Large tracks) (Small tracks) | 5.00 in 3.50 in |
| | Speed | 0 to 35 feet/m |
| | MAX Grade | 45 deg |
| | Supply Voltage | 110/220 VAC |
| | Frequency | 50/60 Hz |
| | Consumption | 200 W max |
| | Operating Temperature | -10 °C to 50 °C |
| | PWM Control | Yes |
| | Obstacle Climbing | UP to 1 in |
| | Cable | 80 fat Standard UP to 100 fat opt |
| VISION SYSTEM | Vision System | Camera1 |
| | Number of pixel | 512(H) x 582(V) |
| | Usable Illumination | 0.5 Lux at F=1.2 |
| | Video Output | 1.0Vp-p, 75 Ohm |
| | Lens | 3.6 mm |
| | Resolution | 420 TV Lines |
| | White Light Brightness reduction | Xenon |
| | Camera 2 | Optional |
| PLAYER & RECORDING | Video Player & Recording 130 Hour of video | Video Output |
| | Hard Drive | 30 GB |
| | Play DVD-Quality video | Secam Pal & NTSC |
| | Play | MPEG-4 WMV |
| | USB 2.0 | Input / Output |
| Air Pressure | 120 PSI 170 PSI (Optional) | |
| AIR INPUT | PLUG IN | |
| Security Key | YES | |

For ducts starting at 3.5X6 inches

For brushing and inspection

