

FORKBOT™

New!



For Large Vehicle Bomb Threats

Tele-Operated, Remote Control, Heavy Lift Vehicle and Sensor/Weapons Platform

The ForkBot™ was developed jointly with the Las Vegas Fire & Rescue Bomb Squad for its Heavy Equipment and Render Safe Technology (HEARST) program. It is a multipurpose unmanned vehicle with sensor and weapons capabilities. Operable to 3000 ft. with RF or Fiber Optic links. 10,000 lbs to 36,000 lbs lift capacities available.

100% of the ForkBot™ and accessories can be purchased with grant funds through the Department of Homeland Security's (DHS) Office for Domestic Preparedness (ODP) Homeland Security Grant Program (HSGP)



Countermeasure options you didn't have before:

- Remotely lift and transport vehicles, crates, trash dumpsters and other items too large for typical EOD robots
- Remotely clear heavy debris and barricades from unsafe areas
- Enhance remote surveillance using multiple cameras and camera heights
- Remotely breach stubborn obstacles using robust fork tongs
- Remotely disrupt explosive devices using the onboard armament capability
- Remotely deploy and operate heavy equipment (large disrupters, jaws-of-life, sensor systems, etc.)
- Intuitive remote control design means the operator focuses on the mission, not the controls
- Switching between remote and manned operations takes less than 30 seconds

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The ForkBot™ is the result of over 20 years of robotic design and manufacturing experience yielding over 30 fielded robot systems.



SPECIFICATIONS

Tele-Command® Technology Suite: STANDARD CONFIGURATION PACKAGE

FEATURES

Remote Functions: Throttle, transmission, steering, braking, lifting, lighting and equipment command functions, video cameras, vehicle & equipment status monitoring, auto-safing, manual emergency shutdown, weapons arming and firing

Remote-to-Manual Switchover: under 5 minutes

ODP Grant Eligibility
JAUS Compliance Option

REMOTE OPERATING DISTANCE

RF Mode: Approx. 3000 ft (1000 meters)
Tethered Mode: 3000 ft (1000 meters)

COMMAND, CONTROL & COMMUNICATIONS LINKS

RF Mode:
Data Link: 902 MHz – 928 MHz*
Video Link (NTSC): 2400 MHz – 2500 MHz*
*subject to user-specified frequency-use allocations
Tethered Mode: Fiber Optic Cable

SAFETY FEATURES

Startup self test
Continuous self monitoring
Auto-Safe Mode
Manual override/Emergency Shutdown
Redundant anti-highjack, anti-jamming features:
Encrypted link
Frequency Hopping Spread Spectrum (FHSS)
CRC – cyclical redundancy checking
Watchdog feature (continuous password code checking)
EMI – minimized radiation susceptibility
Others

VIDEO CAMERAS

Driving Camera Color, Pan and tilt
Payload Camera Color,
Rear Camera Black & White

RENDER SAFE WEAPONS FEATURES

DukePro Six-channel shock tube initiation interface
Electrical interfaces for optional accessories

SYSTEM OPTIONS:

10,000 lbs to 36,000 lbs Lift Capacity Vehicles
Transport Trailers
Control Site Vehicles

Low Illumination Cameras
Blast Protection
Sensors

SAMPLE VEHICLE SPECIFICATIONS

(YALE GDP100 MJ LIFT TRUCK w/ UPGRADES)

Lift Capacity.....	10,000 lbs (4545 kg)
Vehicle Speed:	
Fully Loaded:	14.5 mph (23.3 kph)
No Load:	14.8 mph (23.8 kph)
Engine.....	Diesel – Perkins 1004.42
Horsepower.....	80.6 @ 2200 rpm
Torque.....	192 ft-lbs @ 2200 rpm
Vehicle Weight.....	16,010 lbs (7262 kg)
Vehicle Height (fork down).....	91.3 in. (231.9 cm)
Vehicle Width.....	57.1 in. (145 cm)
Lights:	Strobe Light Headlights (2) Rear Work Light Stop/Backup Lights

Mast Type.....	Simplex
Side Shifter.....	Yes
Fork Lengths.....	72 in. (182.9 cm)
Max Fork Height (raised).....	112.2 in. (285 cm)
Mast Tilt.....	6 degrees forward/6 degrees back
Tires.....	Solid Tires



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