



BOMBTEC RESPONDER

IEDD Remotely Operated Vehicle

Titanium construction for increased strength and reduced weight

Powerful Manipulator

Open Architecture Digital Electronics

Highly manoeuvrable within confined spaces

4 motor drive – each track is directly and independently driven

3 camera video system

Spread Spectrum RF Telemetry

Built-in self-diagnostics

Bluetooth hand controller

Fully proportional control

Battery level and RF 'field strength' feedback at console

Secure firing system with status display at console

Optional wheel upgrade kit available (as shown)

OPTIONAL EQUIPMENT

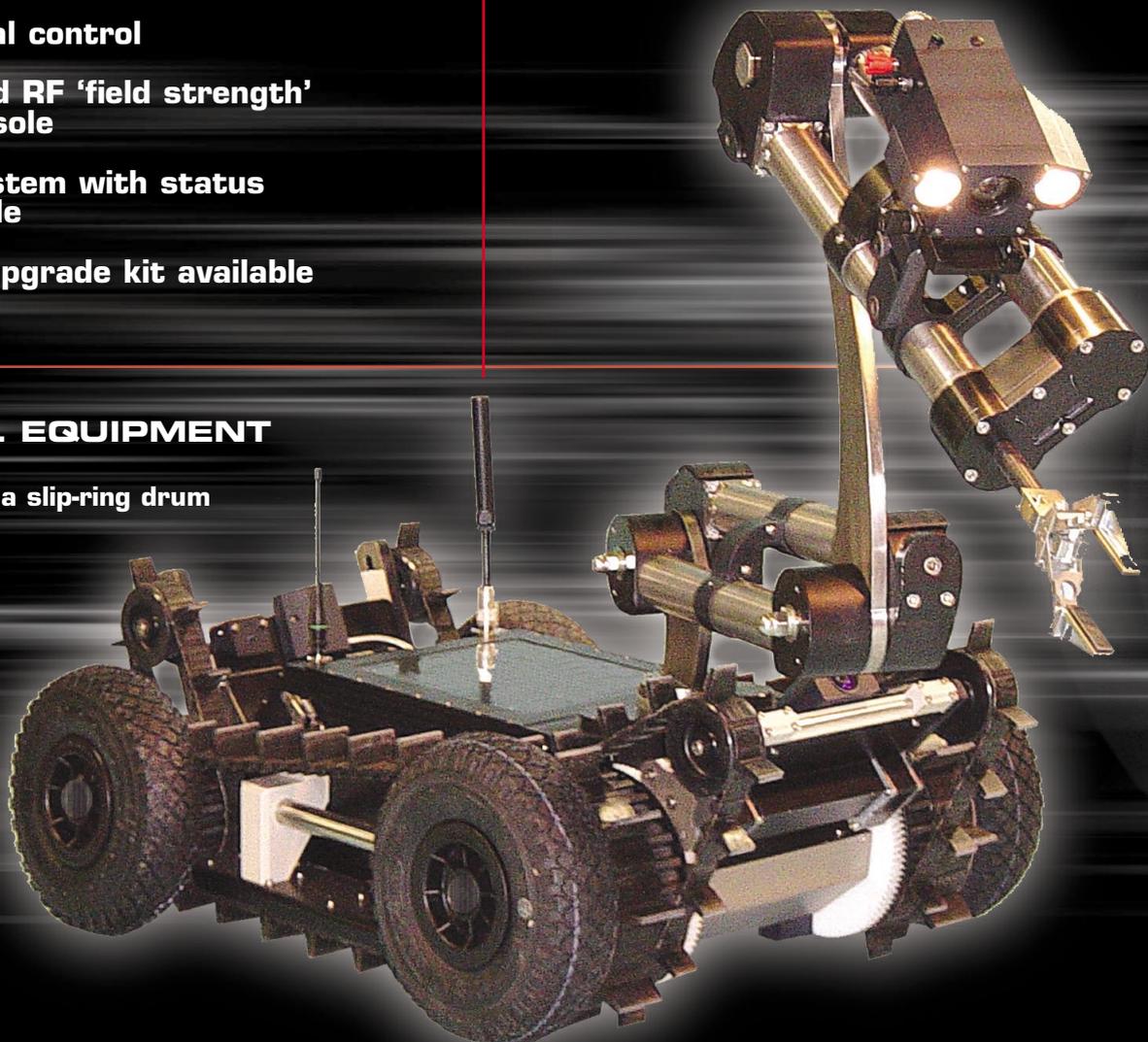
- 250m cable on a slip-ring drum
- Wheel Kit
- Shotgun
- X-ray Kit

STANDARD EQUIPMENT

The vehicle is fitted with a rotating turret plate onto which the desired operating tool can be fitted.

Typical tools would be:

- The DDM (Disrupter Deployment Module) can accommodate most disrupters
- Three sectional arm which has a claw with tilt rotation and grip
- Removable claw



ITEM

Responder Robotic Vehicle

STOCK NO.

00-632-001



TECHNICAL DATA

| | |
|-------------------------|---|
| Length | 800mm |
| Width | 450mm |
| Height | 260mm |
| Arm 'Closed' | 600mm |
| Vertical reach | 1600mm |
| Horizontal reach | 1500mm |
| Below Ground | 300mm |
| Weight | 45kg |
| Speed | 0-36m/min |
| Maximum Slope | 38° |
| Maximum Obstacle | 150mm |
| Turret Pan | ±140 |
| Turret Tilt | -10 + 15 |
| Cameras: | 1 x with 'zoom' 2 x 'Starlight' technology |
| Lights | 2 x 24watt |
| Power | 24V 13.5 Ah Battery Supply |

ALSO SUPPLIED WITH:

- Battery pack and charger**
- Control Console**
- Integrated spread spectrum RF control system**
- Field spares Parts**
- Owners Manual**
- Documentation**

The **RESPONDER** is a high specification, robust, small yet powerful ROV designed for reconnaissance and weapon delivery in rapid deployment scenarios within areas of restricted physical access. Responder features the latest digital electronic control system to provide operators with a highly flexible and agile machine that delivers maximum feedback at the Incident Control Point.

The vehicle features distributed architecture electronic infrastructure (i.e. the robot and all of its electronics devices are configured as a computer network) that allow other items of equipment to be delivered as part of its mission payload and then remotely operated from the control console. The radio control system on the machine uses a purpose built encrypted spread spectrum RF system that carries the digital bi-directional telemetry control and the twin video streamer output. The massive operating advantage this provides to the operator is flicker free video images and full telemetry control over long distances in built up areas and inside buildings. The real time RF 'field strength' at the ROV is always displayed on the control console so that an operator is aware if the machine is about to go out of range. As an alternative a 'twisted pair' or fibre optic type cable control can be used at distances of up to 250m.

Drive and proportional speed is by a joystick allowing the unit to turn within its own diagonal length. The front and rear ramp sections provide an adjustable footprint and this gives additional traction to permit the vehicle to negotiate obstacles otherwise unattainable. The unique track design with its 4 motor drive system ensures excellent power and traction especially when stair climbing and on slopes. An optional wheel kit is available.

Responders' lightweight Titanium construction ensures excellent robustness with a high power to weight ratio allowing greater operational life from the quick release battery pack. The 3 section removable manipulator arm has a 1.5m reach with a load capacity of 5kg and is capable of delivering a lightweight or single shot disrupter.

The unique design of the manipulator incorporates 6 axes of movement normally associated with larger robotic systems and employs a quick release mechanism for fast deployment and easy storage of manipulator accessories.