



EyeBall R1™

WIRELESS DEPLOYABLE SENSOR

A Compact 360° Reconnaissance Device





Eye Ball R1 - A Compact 360° Reconnaissance Device

The system includes two 360 degrees rotating sensors, which enable real-time wireless video and audio transmission to a remote and mobile display unit. Each sensor is packaged in a hand-held durable ball, which is designed to be thrown to remote and potentially dangerous locations, without exposing the operator to danger.

The Eye Ball sensor can sustain shocks and vibrations as well as other harsh environmental conditions.

The remote display unit not only enables the operator to view the image received from the Eye Ball sensor, but also to control the rotation direction of the sensor and additional functions.

The various accessories which are supplied with the system (e.g. telescopic pole, lowering wire adapter) enable a wide variety of system operation profiles.

Main Applications:

• Military Applications:

Counter-terrorism operations and low intensity conflicts – designed to be thrown into buildings, tunnels, caves or any "out-of-sight" or potentially dangerous area to enable remote observation from a safe location.

• Law Enforcement:

• Search and Rescue:

Small sized sensors – can be deployed into collapsed structures to locate trapped and injured people.

• Perimeter Security and Surveillance Applications:

The small sized sensor can be easily concealed in various surroundings.

The Camouflage kit (optional, provided separately) enables the sensor to be fully assimilated in numerous environments and locations allowing for prolonged surveillance operations.

System Performance Highlights:

- Continuous real-time video and audio transmission.
- Works in low light conditions.
- Wireless transmission to a range of hundreds of feet.
- Resistant to harsh environmental conditions.
- Attachable to various accessories enabling unique operation profiles.

Eye Ball

R1

SYSTEM

Accessories Kit (Optional) ▼



System Includes:

- 2 Eye Ball R1 sensors
- Portable Display & Control Unit (PDU)
- Two chargers (110/220VAC auto-sensing wall plug-in type)
- Training ball
- Earphone
- Telescopic pole
- Lowering wire adapter
- ¼" adapter for optional accessories
- Brush and lens cloth
- PDU jacket and shoulder strap
- Two sensor holsters
- Spare components

Optional Components:**Accessories Kit (Optional):**

- Tripod
- Spike (for wedging sensor into ground)
- Clamp (for attaching sensor to smooth surfaces such as glass or metal)
- Screw (for attaching sensor to surfaces such as wood)

**Command Kit (Optional) - Display and Control from a Remote Computer / Laptop:**

The command kit contains unique software and hardware, allowing control of the sensors and viewing the image received from the rotating Eye Ball sensors as well as presentation of a 360° continuous image on a remote computer / laptop screen.

The command kit enables advanced image understanding features such as advanced Video Motion Detection (VMD), objects change detection, objects recognition, object tracking and behavior understanding as well as real-time smart archiving.

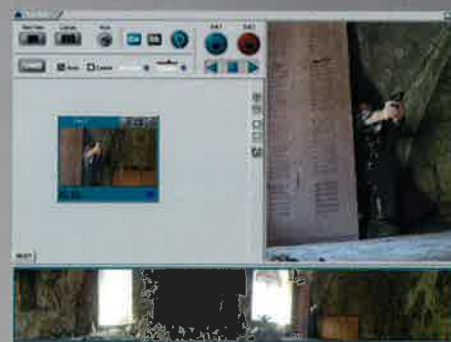
Software compatibility - Windows 98, Windows NT, Windows 2000, Windows XP

System requirements - 2+ Ghz processor, at least 256 MB RAM, Graphic accelerator with at least 64 MB RAM, 200 MB available disk space, USB 2 port.

**Camouflage Kit (Optional):**

The designated camouflage skins can be easily stretched over the Eye Ball sensor, helping it to be fully assimilated in numerous environments for prolonged surveillance operations.

The user can choose his desired type of camouflage skin out of a catalogue.





System Specifications

Image Sensor

Color	(switches to B/W automatically in low light conditions)
Resolution	470 TVL
Frame rate	Live video - 25 fps
Sensitivity	0.05lux (night)
FOV	55°
Shutter	Automatic shutter

Audio - Microphone

Detection field	Omni directional detection
Sensitivity	Detects human voice from a distance of 5 meters
Special features	Automatic squelch to decrease noise

Video and Audio Transmission

Transmission distance	Indoor - 30m (approximately) Outdoor - 150m (approximately)
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Illumination Source

Wavelength	N.I.R
Illumination distance	8 meters
Light sensor	Enables automatic activation and deactivation of the illumination source according to lighting conditions

Rotation Motor

Rotation speed	4 rpm
Special features	Quiet operation Operates in harsh environmental conditions Enables operation in continuous Scan Mode

Rechargeable Energy Pack

Advanced rechargeable batteries	Illumination LEDs on - up to 2 hours Illumination LEDs off - up to 2½ hours Standby mode - up to 24 hours
Maximum time to full recharge	Up to 2 hours

Mechanical Specifications (sensor)

Dimensions	85mm diameter
Weight	580 gr
Stabilization	Quick self stabilization

Portable Display and Control Unit

(Enables display of 2 sensors alternately)	
Resolution	960(V) X 234 (H)
Size	Display screen 6.4"
Monitor type	TFT
Brightness	Brightness control, 300cd/m²
Contrast	Contrast control 1:200
Energy	Continuous operation up to 3 hours

Control Unit - Switches and Interfaces

(Control over 2 sensors)	
Rotation	Enables activation/deactivation of continuous rotation
Nudge	Enables nudging sensor by 10°/30° Enables control over rotation direction (left/right)
Scan	Enables sector definition and activation of continuous scan within sector limits
Channel	Controls sensor transmission channel
Illumination	Controls sensor illumination - off/on/auto
Volume	Volume control
Brightness	Brightness control
Contrast	Contrast control
Mute	Turns sound off/on
Zoom	Zooms in/out
Flip view	Rotates the image 180°
S - Video connector	A video output socket enables connection to an external recording device
Earphone	Earphone connector
Standby	Enables energy reservation

Charger

Charger for the Eye Ball sensors and the display unit	
Input voltage	110 v AC - 220 v AC, Vehicle adapter (Optional)



Operating this device may require authorization of local communication regulation authority.
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