



# PROX-EYE™ DUAL

## Visual Guidance System

YOUR CONSTRUCTION TECHNOLOGY PROVIDER

**SITECH**®

# PROX-EYE™ DUAL Visual Guidance System

## ZERO HARM ON WORKSITES

PROX-EYE DUAL by Correct AI is a visual guidance system that combines HD cameras, LiDAR sensors and artificial intelligence software to assist vehicle operators monitor and dramatically reduce risks around their equipment.

The system provides real-time proximity awareness and terrain hazard notification to operators of heavy industrial equipment. It is designed for equipment owners and operators of application-specific vehicles operating in industrial environments.

PROX-EYE is a cost effective and durable system revolutionising the way that industrial vehicles are managed on challenging worksites.



Front and rear camera/ LiDAR modules



7" touchscreen operator monitor



In-cab operator view

## CORRECT-AI

### Industrial Robotics & Artificial Intelligence

PROX EYE by Correct-AI is the most advanced system on the market, utilising the most precise object detection technology available.

No other system offers the proprietary AI software that forms part of the solution. The cameras and LiDAR sensors provide vehicle operators with intelligent warnings of imminent danger, minimising the risk of collisions, rollovers and struck bys.

The unique combination of technology means that the system works in any environmental condition – such as complete darkness, fog, dust, snow, heavy rain, or direct sunlight.

## FEATURES

- ▶ High definition camera
- ▶ Highresolution LiDAR
- ▶ 7" display
- ▶ Mounted inside operator's cab
- ▶ Customisable detection range
- ▶ Customisable hazard classification
- ▶ Elevation mapping
- ▶ Roll-over risk warning
- ▶ Data collection of all audible alert zone encounters
- ▶ Video documentation of equipment operation

## BENEFITS

### Safety

- ▶ Accident-free industrial worksites
- ▶ Incident prevention

### Data Archiving

- ▶ Records sensor data for post incident and efficiency analysis

### Slope Detection

- ▶ Continuous monitoring of grade changes

### Roll and Pitch Angle

- ▶ Continuous reporting of roll and pitch angles to prevent roll-overs

### Enhanced Operator Capacity

- ▶ Displays, classifies and shows all hazards and their distance to eliminate false positives

### Increased Operator Confidence

- ▶ Provides real-time proximity awareness and terrain-hazard notifications whilst recording operational data for future review

### Increased Efficiency and Productivity

- ▶ Gains achieved through enhanced operator capacity and confidence
- ▶ Lower operating and repair costs

## SAMPLE APPLICATIONS

- ▶ Agriculture
- ▶ Logistics
- ▶ Construction
- ▶ Mining
- ▶ Energy
- ▶ Pipeline



## PRODUCT SPECIFICATIONS

### Monitor: 7" LCD Touch Screen Monitor

#### Specifications

Screen	Resolution: 1024 x 600 Sensitivity: Tough Screen Brightness: 500 cd/m2 Contrast Ratio: 500:1 Backlight LED View Angles: 50/60B/65L/65R
Power	12 VDC
Mount	VESA Mount 75mm x 75mm (100mm x 100mm) Metal Case

#### Environmental

Operating Temperature	-20° to ~60°C (-4° to 140°F)
Vibration Tolerance	10 G
IP Rating	IP 65

#### Mechanical

Dimensions	204 x 132 x 42 mm
Weight Approx.	2000 g

### Cameras: 1080P HD Cameras

#### Specifications

Sensors	3 MP IMX307 Black Light CMOS Sensor:
Image Output	1920 x 1080 @ 25 fps
Shutter Speed	1/50 (1/60) seconds to 1/10,000 seconds
Field of View (FOV)	100° (horizontal)
Day-Night Mode	Support IR-CUT:
Network Interface	RJ45 Ethernet Interface
Power	12 VDC/ 2 A
Power Consumption	≤ 3 W:
Night Vision	Built-in IR LEDs

#### Environmental

Operating Temperature Range	-40° to 85°C
Storage Temperature Range	-40° to 85°C
IP Rating	IP 67

#### Mechanical

Dimensions	77 x 115 x 84 mm
Weight	Approx. 1200 g

## PRODUCT SPECIFICATIONS

### LiDAR: High Resolution Point Cloud

#### Specifications

Laser Wavelength	905 nm
Laser Safety	Class 1 (IEC 60825-1:2014) - (safe for eyes)
Detection Range (@100klx)	90 m @ 10% Reflectivity 130 m @ 20% Reflectivity 260 m @ 80% Reflectivity
Field of View (FOV)	82° (horizontal) x 25° (vertical)
Point Rate	240,000 points/ s
Data Port	100 Mbps Ethernet
IMU	Built-in Inertial Measurement Unit (IMU)
Power	12 W (Startup: 30 W)
Power Supply Voltage Range	10-15 VDC (Recommended 12 VDC and 30 W or higher)

#### Environmental

Operating Temperature Range	-40° to 85°C
Storage Temperature Range	-40° to 85°C
IP Rating	IP 67

#### Mechanical

Dimensions	77 x 115 x 84 mm
Weight	Approx. 2000 g

### System Performance

#### Specifications

Reaction Time	≤0.5 s
Obstacle Detection Range and Types	Humans ≤ 10 m Vehicles ≤ 100 m General Obstacles (larger than 30 cm) ≤ 100 m
Notifications	Adjustable by the operator for three zones
Situational Awareness	Obstacles Detection Obstacles Identification Depth Map Elevation Map Road Slope Vehicle Road and Pitch Angles



[www.sitechsolutions.com.au](http://www.sitechsolutions.com.au)

2 Voyager Circuit Glendenning 2761

T: 02 6788 2155 | E: [sales@sitechsolutions.com.au](mailto:sales@sitechsolutions.com.au)

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