# Cat® Detect - People Detection

for Excavators



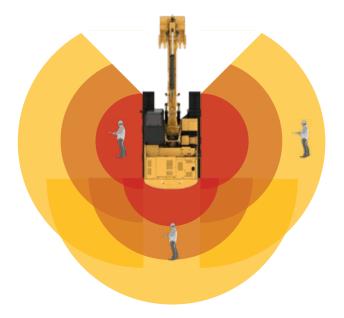
## IMPROVE SAFETY AROUND OPERATING EQUIPMENT

People working near heavy equipment on a jobsite have a risk of being struck by a machine. While machines are designed to maximize operator visibility, it can be challenging to constantly monitor what is going on around them. Cat® Detect - People Detection for excavators is an intelligent vision camera system that can alert an operator when someone enters within a machine's hazard zone.¹

- Helps to reduce the risk of injury for people working around machinery.
- Differentiate people from background objects detects multiple moving and stationary workers.
- Provides visual and audible alerts to the operator using the in-cab display.
- Utilizes the machine's existing in-cab display and harness with a dealer-installed three-camera kit.
- Designed to function without the need for additional technologies.
- Compliments other safety systems and improves operator safety awareness.

### > HOW IT WORKS

- Continuously monitors for personnel within three detection zones around the excavator.
- Utilizes three cameras with up to 270-degree coverage -9 m (29.5 ft) maximum detection distance.<sup>2</sup>
- Highlights people with red detection boxes on the in-cab display to help increase operator awareness.
- Triggers progressive visual and audible alerts based on a person's proximity to the machine - three detection zones.
- Detects multiple moving and stationary personnel simultaneously during machine travel and operation.
- Provides both in-camera and off-camera monitoring.
- Not compatible with Cat Command remote control technologies.



#### DETECTION ZONES

Red Zone (Critical)
Amber Zone (Caution)
Yellow Zone (Awareness)



<sup>&</sup>lt;sup>1</sup> The system may not detect personnel in certain circumstances, such as fast swings speeds, people lying down or crouching, or when cameras are impaired by low light conditions (dusk, dawn, overcast), inclement weather (snow, rain, fog), or other similar conditions. See operation and maintenance manual regarding limitations of use.





## > IN-CAMERA MONITORING

When personnel are detected near a hazard zone, and within direct camera view, a visual alert is shown on the incab display<sup>3</sup>, and an optional audible alarm is played.

- Visual Alert Icons Directional icon alerts indicate both location and distance level when personnel are detected. Three color levels provide approximate proximity to the machine - red (critical), amber (caution), and yellow (awareness).
- Audible Alert Icons Communicate if the People Detection system is active (standby/on/off), if an audible alarm is active (on/off), or if there is a system error causing People Detection not to function properly.
- People Detection Indicator A red boundary box surrounds personnel that have been detected within a hazard zone to help increase operator awareness.



#### In Camera View

#### **VISUAL ALERT ICONS**

People Detected Yellow Zone - Awareness People Detected Amber Zone - Caution People Detected

#### **AUDIBLE ALERT ICONS**

Red Zone - Critical







System Error

## > OFF-CAMERA MONITORING

When personnel are detected near a hazard zone but are <u>not</u> within direct camera view, a visual alert is shown on the in-cab display<sup>3</sup>, and an optional audible alarm is played.

- Audible Alert Icons Identical to in-camera monitoring.
- Visual Alert Icons Identical to in-camera monitoring.
- Side Bar Indicators Off-camera directional icon alerts indicate both location and distance level when personnel are detected. Three color levels provide approximate proximity to the machine - red (critical), amber (caution), and yellow (awareness).
- People Detection Indicator The red boundary box for personnel detection is <u>not available</u> in off-camera or 360-degree views.

## SIDE BAR INDICATORS

People Detected
Amber Zone - Caution

People Detected Red Zone - Critical



People Detected

Yellow Zone - Awareness

Off-Camera View



360-Degree View

## > HOW TO UPGRADE

Contact your Cat dealer for more information and how to order Cat Detect - People Detection for Excavators.

Indicates

Person

Detected

- Model and technology availability may vary by region.
- Cat Detect People Detection compliments but does not replace the basic safety precautions and procedures for machine operation.
- · Always follow recommended safety procedures when operating or working around equipment.

#### www.cat.com



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