

Prevent tray collisions in height-restricted work areas

Tray Collision Warning

The Muirhead® Tray Collision Warning system provides an operator a visual and audible warning of an impending tray collision when operating in a height-restricted working area.

The system utilises a programmable ultrasonic sensor with two configurable switching outputs that provides the operator with a three-stage visual and audible alert. This ensures the operator is aware of a raised tray and warned before any collision caused by raising the tray.

When the machine is turned on and the tray is in a lowered position, the device will be in an idle state.

Stage 1: When the controller senses the tray has been raised, but does not detect any close obstructions, the display visually alerts the operator that the tray is raised. When the tray returns to the lowered position, the display will return to its idle state.

Stage 2: When the controller senses that the tray has been raised and is in proximity to an obstruction (1 metre by default), the display will change to the 'stage 2' warning and begin to flash. An audible alarm will also begin to pulse on and off. When the sensor detects that the obstruction is no longer within this set distance, the display will revert to the 'stage 1' warning.

Stage 3: When the controller senses that the tray has been raised and is in very close proximity to an obstruction (0.5 metres by default), the display will change to the 'stage 3' warning and continue to flash on the screen. An audible alarm will remain sounding during this stage. When the sensor detects that the obstructions is no longer within this set distance, the display will revert to the 'stage 2' warning.



TRAY DOWN - OK



STAGE 1 - AWARENESS



STAGE 2 - COLLISION RISK



STAGE 3 - STOP ESSENTIAL

Reference: SBMH0721001

Features

- Simple and easy to install
- Three-stage visual and audio alert
- Compact and robust control panel design
- Can help prevent machine damage
- Surface or underground applications
- Ultrasonic sensor is programmable to customer requirements
- Optional warning and alarm switching outputs for customer convenience

Specifications

Dimensions	121mm (L) x 63mm (W) x 40mm (D) (4.76" x 2.48" x 1.57")
Weight	0.2 kg (0.44 lbs)
Operating voltage	11 to 36 Vdc
Operating temperature range	-20C to 60C (-4F to 140F)
Connection types	26-pin receptacle
Inputs	Switch inputs, battery supply, ground
Minimum & maximum input voltage	0 to 36 Vdc
Circuit protection	Inbuilt 10 A fuse, onboard transient voltage suppressors, polarity protection
Maximum current ratings	Input = 3.5 A
	Individual outputs 1, 2, 3 and 4 = 2 A maximum
	Outputs 5 and 6 = 0.5 A maximum
	Combined output = 3.5 A
Maximum current consumption (no outputs)	Input voltage and software dependant, absolute max @ 12 V, 300 mA
Enclosure type	ABS
Environmental rating	IP65

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