



Case Study

Feature EAO Emergency-stops.

*For Heavy-Duty Remote Wireless Controls.*

EAO's emergency-stop switches easily integrate into the pistol grip and belly-band designs for pendant and remote controls.

*The low-profile Series 84 provides an ideal solution.*

# Series 84 E-Stops have a behind-panel depth of just 18 mm. These products are perfect for machinery, medical equipment, rail applications, and driverless vehicles.

*“Modular construction allows for the customisation of the control systems to fit specific application requirements.”*

## Company Profile

**Customer**  
Heavy-Duty Vehicle and Construction Equipment Manufacturers

**Market**  
Lifting and Moving/Off-Road Equipment

**Application**  
Remote Wireless Controls

**EAO Series**  
Series 84



The ability to withstand harsh operating environments is a must for controlling safety applications.



EAO's Series 84 E-Stop can offer several contact configurations, possible illumination, and a visible actuation indicator ring.

## Business Challenge

Safe, reliable industrial wireless radio remote controls are used for demanding applications in industrial wireless control, mining, mobile equipment, locomotives, and overhead cranes. These controls can be packaged as pistol grip hand-held controls or belly band control systems.

Wireless pistol grip hand-held controls offer durable and reliable remote control for harsh industrial and off-road applications. The pistol grip controls provide single-handed operation in a comfortable ergonomic design. The remotes often use direct sequence spread spectrum (DSSS) wireless technology at 900 MHz or 2.4 GHz for a robust link in even congested radio environments. The pistol grip units and base units are seamlessly connected without opening the case of either unit. In addition to their wireless connection, the units can also be hard-wired using an umbilical cord cable back-up.

Belly band controls include radio remote control systems that are resistant to harsh environments, reliable, and safe. Modular construction allows for the customization of the control systems to fit specific application requirements. Systems are equipped with communications interfaces to connect to construction or industrial equipment.

EAO's emergency-stops easily integrate into the pistol grip and belly band designs and provide the rugged and reliable operation that is necessary in applications controlling:

- Utility equipment
- Mechanics and mobile cranes
- Track equipment
- Hydraulic trailers
- Cement mixers
- Vacuum trucks
- Towing equipment
- Drilling rigs
- Winches

## Solution

EAO works with heavy-duty equipment manufacturers to provide Emergency Stop (E-Stop) switches that fit the ergonomic design of pistol grip, pendant, and belly band remotes to deliver the reliable shut down operation the application requires.

EAO's Series 84 E-Stops offer a unique low back-of-panel depth at just 18mm maximum, optional illumination, single mono-block construction, and a twist-to-release actuator. These products allow for great flexibility in many applications including, machin-

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9001, ISO 14001, IRIS, and ISO/TS 16949 certified for automotive and other industry requirements.

Belly band controls include radio remote control systems that are resistant to harsh environments, reliable, and safe.

ery, medical equipment, rail applications, and autonomous vehicle control. The Series 84 E-Stops are rated at 3A 120VAC and 1.5A 240VAC, and are protected against oil and water to IP 65 standards. Series 84 E-Stops meet international safety specification ISO 13850 and comply with EN IEC 60947-5-1 and EN IEC 60947-5-5 requirements.

#### Results

EAO's E-Stops are an important part of pistol grip remote and pendant control solution, as well as belly band control modules:

- Ergonomic design for ease of use.
- Fingertip control with good tactile feedback.
- Rugged construction and reliability.
- Easy integration into the compact pistol grip design

It's important to work with an HMI expert who can address all the human factors, technical and commercial considerations of a complex HMI development project.

EAO is a global partner and manufacturer of HMI Systems and HMI Components to a range of markets including machinery and automation, public transport, automotive design, special purpose and heavy-duty vehicles, as well as many others that involve an interaction between humans and machines. EAO is here to make this interaction innovative, intuitive and reliable.

EAO's components and systems undergo rigorous testing to assure reliability, repeatability, and long service life. EAO is ISO