Solutions for Remote-Controlled and Autonomous Mowing

Maximize uptime, usability, and safety with FORT's **Safe Remote Control** and **Wireless E-Stop**

- Rugged, easy-to-use devices
- Safety-rated communication
- Long-range radios

FORT

WIRELESS E-STOP

Data Sheet

Keep Safety in the Palm of Your Hand

In an emergency, every second counts. FORT's Wireless E-Stop (WES) saves valuable time when it matters most. The handheld remote can shut down any machine system from a safe distance.

PREVENT ACCIDENTS AND PROTECT YOUR TEAM

- Patented safety system for maximum reliability
- Redundant two-way monitoring
- Designed to leading industry safety requirements
- All-day battery and long-range connectivity

EASY TO USE AND INTEGRATE

The handset and receiver are in constant two-way communication.

The Wireless E-Stop can be carried or worn on a belt.

The Vehicle Safety Controller (VSC) receiver mounts on the machine and wires into any standard e-stop circuit.

APPLICATIONS

Use on any machine with an e-stop circuit.

INDUSTRIAL

Protect team members with Wireless E-Stops stationed at gateways to high-risk areas, or personal handsets to carry all day.

LABS, EDUCATION, R+D

Keep safety frst when building and testing the robots of the future.

MATERIAL HANDLING:

Prevent warehouse collisions by safely stopping autonomous mobile robots, AGVs, storage and retrieval systems, and more.

HEAVY EQUIPMENT

The Wireless E-Stop can go where you go in harsh outdoor conditions for use with autonomous construction equipment, harvesters, mowers, and more.

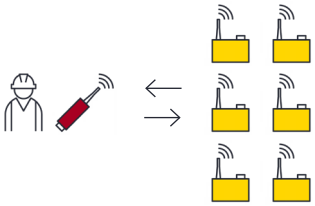
For more information visit fortrobotics.com
+1 (267) 515-5880

FLEXIBLE PAIRING

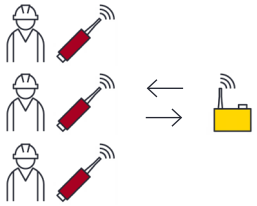
FORT's configuration tool makes it easy to pair multiple E-Stops and receivers. Stop up to 11 machines at once from a single handset.

← FORT Wireless E-Stop & Vehicle Safety Controller

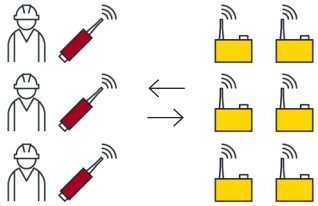
PAIRING OPTIONS



One to many
Shut down multiple systems from a single remote handset



Many to one
Workers carry personal E-Stops for shut down from different locations



Many to many
Stop multiple machines from multiple locations

TECHNICAL SPECIFICATIONS

WIRELESS FREQUENCY OPTIONS

- 900 MHz FHSS
- 2.4 GHz FHSS

LINE OF SIGHT RANGE

- Up to 500m at 2.4 GHz
- Up to 2km at 900 MHz
- May vary based on antenna placement, obstructions, and environment

LATENCY

- TX Rate: 35 ms default
- RX Timeout: 332 ms default
- Confguration-dependent

TRANSMIT POWER

- Up to 1W, subject to local regulations

SAFETY RATING

- Designed to meet ISO 13849 Category 3 Performance Level D 2015 Edition

HANDSET: WIRELESS E-STOP (WES)

- Battery life: Up to 12 hours
- Operates while charging
- IP65 enclosure
- Operating temperature: -20°C to 60°C
- Input voltage, charging: 5V DC @ 2A (USB)
- Measures 6.4″ x 1.95″ x 1.95″
- Approximately 1.0 Lbs
- Optional belt clip
- LED indicators for battery, connection, and e-stop status

RECEIVER: VEHICLE SAFETY CONTROLLER (VSC-006)

- Dual channel safety relays for emergency stop output
- Dual channel emergency stop input loop
- IP66 enclosure
- Operating temperature: -40°C to 70°C
- Input power: 9-36V
- RP-SMA female antenna connector
- Measures 5.9″ x 3.2″ x 2.5″
- LED indicator for e-stop status
- Embedded options also available; contact FORT for details

SAFE REMOTE CONTROL

Data Sheet

Wireless control for any machine

FORT's Safe Remote Control (SRC) is an easy-to-use controller for a variety of machine applications. Operate off-highway vehicles from a distance, take control of an autonomous robot, or stop a machine instantly with the built-in emergency stop. Rugged enough for any environment, the SRC puts you in control of machine safety and productivity.

WORK SAFELY

- Operate dangerous equipment from a safe distance
- Improve visibility of the worksite
- Reduce operator fatigue and injury risk

BOOST PRODUCTIVITY

- Remote operation increases work site productivity
- Lightweight, ergonomic design for comfortable all-day use
- Familiar game-style format reduces training time

CONTROL WITH CONFIDENCE

- Patented wireless system for safety-critical commands
- Built-in emergency stop button and drop detection
- Adheres to leading industry safety requirements

APPLICATIONS

CONSTRUCTION

Operate heavy equipment from a safe vantage point outside the cab.

AGRICULTURE

Safely navigate or stop autonomous tractors and other equipment.

ROBOTIC SYSTEMS

Use with mobile robots or autonomous vehicles for teaching and maintenance.

LABS AND R+D:

Accelerate development and testing with trusted safety controls.

For more information visit fortrobotics.com
+1 (267) 515-5880

The Safe Remote Control pairs with FORT's Vehicle Safety Controller receiver (VSC).

The wireless remote with integrated e-stop button enables control from a safe distance

The remote and receiver are in constant two-way communication.

The Vehicle Safety Controller (VSC) wires into machine's CAN bus and e-stop circuit

TECHNICAL SPECIFICATIONS

WIRELESS FREQUENCY OPTIONS

- 900 MHz FHSS
- 2.4 GHz FHSS

LINE OF SIGHT RANGE

- Up to 2km at 900 MHz
- Up to 500m at 2.4 GHz
- May vary based on antenna placement, obstructions, and environment

TRANSMIT POWER

- Up to 1W, subject to local regulations

LATENCY

- TX Rate: 35 ms default
- RX Timeout: 332 ms default
- Configuration-dependent

SAFETY RATING

- Designed to ISO 13849 PLd Cat 3

HANDSET: SAFE REMOTE CONTROL (SRC)

- Battery life: Up to 12 hours
- Operates while charging
- IP65 enclosure
- Operating temperature: -20°C to 60°C
- Input voltage, charging: 5V DC @ 2A (USB)
- Measures 7.25″ x 6.5″ x 3″
- Approximately 1.1 lbs
- Drop and abandonment detection (user configurable)
- Sunlight-readable LCD, backlight setting
- Controls:
  - Built-in emergency stop safety control
  - (2) 2-axis joysticks
  - (2) 1-axis finger sticks
  - (8) buttons

RECEIVER: VEHICLE SAFETY CONTROLLER (VSC-006)

- CAN-J1939, RS232 and USB data interfaces
- Dual channel emergency stop input loop
- Dual channel safety relays for emergency stop output
- IP 66 enclosure
- Operating temperature: -40°C to 70°C
- Input power: 9-36V
- RP-SMA female antenna connector
- Measures 5.9″ x 3.2″ x 2.5″
- LED indicators for e-stop status
- Embedded options also available; contact FORT for details