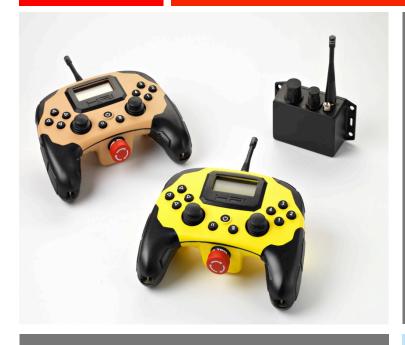# HRI Safe Remote Control System

Safety
For large systems where the stakes are high

- Automatic drop & abandonment detection
- Hardware-based system monitor ensures no single point of failure
- Customizable startup procedure reinforces your safety standards
- Active emergency stop
- IP-66 enclosure takes harsh conditions
- GPS for operator localization

Ergonomics
Cumbersome controllers are a thing of the past

- Designed to fit naturally in operator's hand
- Lightweight for all-day comfort
- Textured rubber grips for traction
- Buttons and sticks placed intuitively for easy finger manipulation

Capability
Advanced features, customizable for the application

- USB, Serial, and CAN Interfaces
- Feedback loop with LCD display
- Multiple operational modes with customizable controls for each
- Variable sensitivity controls
- Switch between multiple receivers
- Mile range LOS; Custom configurable
- Programmable vibratory feedback

Safe Remote Control System

HRI's Safe Remote Control System gives robot and equipment operators the ability to control their machines easily, safely, and with greater comfort. Remote operation provides extra safety, precision, and efficiency for many jobs that are dull, dirty, dangerous, or difficult to do without good visibility. HRI's Safe Remote Control System provides that remote standoff, but with unparalleled ergonomics, meaning the operator can do his job more effectively and feel better at the end of the workday. The system interfaces with a wide range of equipment, from autonomous robots to mobile vehicles to fixed industrial equipment. HRI's SafetySense™ technology ensures consistent safe operation, especially when large equipment is being manipulated around humans and expensive property.

Wireless Communications	
Wireless Link	900 MHz proprietary DSSS (other frequencies available)
Range (Line of Sight)	1 mile
Transmit Power	250 mW (Higher power available)
FCC Approved	Yes
Encryption	AES 128 Base, 256 Optional, Custom Configurations Possible

Transmitter Specifications	
Battery Life	8 Hours
Input Voltage (Charging)	5V DC
Operating Temperature	-20ºC to 60ºC
Ingress Protection	IP66
Ruggedness	Designed to meet MIL-STD-810
Weight	<1.1 Lbs
Radio Connector	RP-SMA

Receiver Specifications	
Data Interface	RS-232, USB (CAN available)
Emergency Stop Input	Differential 5V Signal
Emergency Stop Output	3.3V Signal
Power Requirement	5 – 24 VDC
Operating Temperature	-20ºC to 60ºC
Ingress Protection	IP67 optional
Ruggedness	Designed to meet MIL-STD-810
Radio Connector	RP-SMA
Weight	<1 Lbs
Approximate Size	3.2" x 2.2" x 0.9"