

2022-2023 Product Guide

Material Handling & Overhead Crane Controls



**Industrial wireless remote control solutions with
customer service that is always within reach.**





HH2S SERIES

LIGHT DUTY & BUDGET FRIENDLY

The power of its larger counterparts in a smaller, more affordable unit.

Unique in its class, the **HH2S** Series handheld transmitter offers a host of field configurable features when paired with the MU-9X15 receiver. This handheld comes **standard with the ability to control the three crane motions**, plus Warning/Start, STOP, A/B HOIST Select and can be configured with additional auxiliary controls. The HH2S is also equipped with field replaceable button overlays.

2 AAA Batteries; Up to 70 hours continuous operation	900MHz Channel Hopping DSSS; FCC, Industry Canada License Free
Ten (10) Two-Step Mechanical Pushbuttons; Four (4) LED Indicators; Internal Antenna	
High-Impact Polymer Enclosure with Protective Rubber Bumper	
Operating Temperature: 20°C to 55°C (-4°F to 131°F); Humidity: 0 to 95% non-condensing	

HHMS SERIES

STANDARD AND ENGINEERED CRANE APPLICATIONS

Improved switch reliability and safety versus the competition.

Warrior **HHMS** transmitters feature an industry first, proprietary **fully redundant two-step push button to provide unmatched security**. The switches and switch boots are rated at over 5 million operations. These unique switches, designed and manufactured by Cervis, employ two sets of dual redundant 'contacts' for step one and step two. That is two contacts for step one and two independent contacts for step two improving switch reliability and safety beyond the competition. This handheld comes standard with the ability to control the three crane motions plus Warning/Start, STOP, A/B HOIST Select and can be configured with additional auxiliary controls. The HHMS can also come with optional OLED display for crane control feedback. To further set the HHMS transmitter apart from its competition it is also available with **3 step** and an industry first **ANY_STEP** switch for 4-5 speed or fully variable speed motion control.

Rechargeable Lithium Battery Pack with 72 Hour Run Time	900MHz Channel Hopping DSSS; FCC, Industry Canada License Free
Eight (8) Two-Step Pushbuttons with 5 Million Operations; Dual Contact STOP Switch	
Internal Antenna	Four (4) Diagnostic LED Indicators
High-Impact Polymer Enclosure; Optional Boot and Harness	
Operating Temperature: -20°C to 60°C (-4°F to 140°F); Humidity: 0% to 95% Non-Condensing	



WARRIOR PRE-CONFIGURED SYSTEMS

(all receivers pre-wired with 6' pigtail)

MODEL	DESCRIPTION	OPTIONS	TRANSMITTER(S)	RECEIVER
WARRIOR 22	2x2 Motions, Warning/Start/Stop, 120VAC Control	AC/DC	(2) HH2S-9XW08	MU-9X9
WARRIOR 32	3x2 Motions, A/B Select, AUX, Warning/Start/Stop, 120VAC Control, Configurable For 4 th 2 Speed Motion or AUX Functions	AC/DC	(2) HH2S-9XW10	MU-9X15
WARRIOR ETHOS	3x2 Motions, A/B Select, AUX, Warning/Start/Stop, 120VAC Control, Configurable For 4 th 2 Speed Motion or Aux Functions	AC/DC	(1) HHMS-9XW08	MU-9X15

CONSOLE BOX

HEAVY DUTY PLUS FLEXIBILITY

Perfect for use in harsh environments, including outdoor applications.

The Warrior **Console Box (CB)** transmitter primarily controls overhead bridge cranes. Offering up to **seven single-axis bi-directional levers** or **up to four bi-directional joysticks** for crane motions—as well as toggle switches, pushbuttons, rotary switches, and potentiometer options for auxiliary functions. Housed in an extremely durable, sealed glass-filled nylon enclosure. Transmitter diagnostic LEDs indicate radio signal integrity, battery life, and A/B select to the operator. Optional display provides additional operator feedback.



2 C Batteries or Rechargeable Battery Pack	900MHz Channel Hopping DSSS; FCC, Industry Canada License Free
Internal Antenna; Standard Status/Diagnostic LEDs; Optional Display	
Up to Four Bi-directional Stepped Joysticks or Seven Single-Axis stepless Levers	
User-Programmable Tilt Switch; Dual-Contact Push/Pull Stop Switch	
Optional Deadman Enable Bar	
Options for Toggles, Potentiometers, Pushbuttons, Rotary Switches, and Key Switches	
Glass-filled Nylon Enclosure; Shoulder Harness Standard	
Operating Temperature: -20°C to 55°C (-40°F to 131°F); Humidity: 0% to 95% Non-Condensing	

LARGE CONSOLE BOX

EXTREME DUTY FOR THE TOUGHEST CONDITIONS

Highly customizable for mill duty operations.

Designed for overhead bridge crane control, the Warrior **Detent-Lever Large Console Box (LCB)** features up to six single-axis, 'stepped' levers. Housed in a durable, rigid urethane enclosure, the Warrior LCB is **ready for duty in harsh environments, including outdoors**. This large platform transmitter's ergonomic design is great for the operator and provides easy access to all controls.

2 C Batteries or Rechargeable Battery Pack	900MHz Channel Hopping DSSS; FCC, Industry Canada License Free
Internal Antenna; 4 Standard System Status/Diagnostic LEDs; Optional Display	
Up to Six (6) Single-Axis Stepped Levers	
User-Programmable Tilt Switch; Dual-Contact Push/Pull Stop Switch	
Optional Deadman Enable Bar	
Options for Toggles, Potentiometers, Pushbuttons, Rotary Switches, and Key Switches	
Urethane Enclosure; Polycarbonate Faceplate; Shoulder Harness Standard	
Operating Temperature: -40°C to 70°C (-40°F to +158°F); Humidity: 0% to 95% Non-Condensing	



SPECIAL FEATURES

- ✓ Tandem Crane Control Options
- ✓ Split Bridge and Trolley/Hoist Options (Festoon-less Crane Control)
- ✓ Optional "Onboard" Warning Devices
- ✓ Bi-directional Communication Standard with Feedback Options Available
- ✓ CSA Certification Available
- ✓ Universal Spare Transmitters
- ✓ All Products Backed by Unparalleled Cervis Tech Support





MU-9X9

SMALL FOOTPRINT PLUS FLEXIBILITY

Affordable precision for hoist/trolley applications.

The Cervix Warrior **MU-9X9** is an affordable receiver intended for use on industrial hoists and other industrial applications **where precision control is required and space is at a premium**. The MU-9X9 receiver is designed with 6 control relays plus two series STOP relays and Warning/Start. Typically used in single or two speed hoist/trolley (monorail) applications or in split bridge trolley control set ups where crane festooning is not present.

7 to 32VDC; 10 to 28VAC @ 50-60Hz; 110 to 230VAC @ 50-60Hz
900MHz Channel Hopping DSSS; FCC, Industry Canada License Free; External Antenna
NEMA 4, 4X, 6, 6P & IP65/67 Rated; Designed to ICS 8 NEMA Crane Specification
Mainline Contact (MLC) Safety Circuit
Six Control Relays plus Warning START/STOP and Horn/Light Relays (Two in series for MLC); 5A Maximum Contact Rating @ 250VAC
Operating Temperature: -25°C to 70°C (-13° to +158°F); Humidity: 0% to 95% Non-Condensing

MU-9X15

HEAVY DUTY FOR TOUGH ENVIRONMENTS

Operate worry free in harsh weather conditions.

The Cervix Warrior MU-9X15 is a low cost receiver intended for use on industrial overhead cranes. Specifically designed to cover most of today's standard crane set ups the MU-9X15 comes pre-configured for 3 motion 2 speed crane control with A/B Hoist select relays. Using the receivers on board DIP switches the receiver can be configured by the user for many options including 4 wire hoists, 4th 2 speed or AUX functions and various A/B Hoist select sequences. The MU-9X15 is designed for installation flexibility allowing you to cover many applications with one piece of hardware with the flip of a DIP switch.

9 to 36VDC; 10 to 28VAC @ 50-60Hz; 115 to 230VAC @ 50-60Hz
900MHz Channel Hopping DSSS; FCC, Industry Canada License Free; External Antenna
NEMA 1, 2, 4, 4X, & IP65/67 Rated; Designed to ICS 8 NEMA Crane Specification
Mainline Contact (MLC) Safety Circuit
Nine (9) Motion Control Relays, Each Fused at 5A @ 250VAC (maximum), Four (4) AUX Relays; 8A Maximum @ 250VAC plus Warning/Start and Series MLC (STOP)
Operating Temperature: -25°C to 70°C (-13° to +158°F); Humidity: 0% to 95% Non-Condensing



MU-9X6E

ULTIMATE CONTROL AND EXPANDABILITY

Modular design for maximum flexibility.

The **MU6E** is a modular receiver intended for use in industrial systems including overhead bridge cranes. This self-contained unit can be **configured with various input/output cards accommodating various I/O requirements**. The MU6E will receive and execute commands from the full range of Cervix Warrior Transmitters and is available in both AC and DC configurations.

12 to 48VDC; 12 to 42VAC; 110 to 230VAC @ 50-60Hz
900MHz, 100mW, Channel Hopping DSSS; FCC, Industry Canada License Free; External Antenna
FORM A and FORM C relay card options along with Analog I/O card options
Mainline Contact (MLC) Safety Circuit: Two (series) Type Form A 8 A @ 250 VAC Fused @ 5 A @ 250 VAC Designed to CAT 3 PLD
Operating Temperature: -40°C to 75°C (-40°F to 167°F*); Humidity: 0 to 99% Non-Condensing <i>*55°C continuous; 75°C peak tested for four hours</i>