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 $4^{\rm th}$ 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

 ${\it User-Programmable\ Tilt\ Switch;\ Dual-Contact\ Push/Pull\ Stop\ Switch}$

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 (-40F 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 Cervis 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 Cervis Warrior MU-9X15 is a low cost receiver intended for use on industrial overhead cranes. Specifically designed to cover most of todays 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 Cervis 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 *55°C continuous; 75°C peak tested for four hours