If the display returns to CAL 0, the A/D is auto ranging, and you will need to repeat the zero and span calibration process.

NOTE:
If Er dP appears on the display, the calibration span weight value has an incorrect decimal point location.

If Er cnt appears on the display, the calibration span weight value has a count by resolution greater than that of the indicator's count by resolution.

If Er nEg appears on the display, the calibration span is in a negative range. Check polarity of load cell connection and repeat zero and span calibration.

If SPAn E appears on the display, the calibration span is out of range. Press ZERO to clear this error. Refer to the A/D Ranging section for additional information.

4) Exiting the Setup Mode

To exit the Calibration and Parameter Setup Menu, momentarily press the CAL switch or scroll through the menu options, by pressing the UNITS button, until donE n appears. Press the ZERO button until donE y appears and then press the UNITS button. The indicator will return to the normal weighing mode. If any menu selections were changed, the new values will be saved.

Note: No new setup information is saved until the scale displays SAVEd and returns to the weigh mode. In the event of a power failure while in the setup mode, any changes that have been made will be lost.

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HARDY PROCESS SOLUTIONS
Measurement ▪ Automation ▪ Productivity

HI 8000 Series

Intrinsically Safe Instrument

Quick Start Guide

9440 Carroll Park Drive
San Diego, CA 92121
Phone: (858) 278-2900
FAX: (858) 278-6700
http://www.hardysolutions.com

CAUTION: UNPACK WITH CARE

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Customer Support Department HARDY PROCESS SOLUTIONS

9440 Carroll Park Drive, Suite 150 San Diego, California 92121

Phone: (800) 821-5831

(858) 278-2900

FAX: (858) 278-6700

E-mail: hardysupport@hardysolutions.com

Web Address: www.hardysolutions.com

2) Select Scale Resolution

After the capacity has been entered, the resolution (count-by) will automatically be set for 5000 divisions. To enter a different resolution, press the UNITS button until the display momentarily shows Cnt by and then displays the current resolution.

The resolution can be a value between 200 and 50,000 divisions of capacity. The UNITS annunciator to the right of the weight display will indicate either lb or kg. Press the ZERO button to increment through the available range of possible resolutions. Once maximum resolution has been reached, the level will roll over to the minimum value.

3) Zero and Span Calibration

Press the UNITS button until CAL 0 appears on the display. Remove all weight from the scale platter. To ensure fast and accurate calibration, be sure there are no air currents or vibration present.

Press ZERO and wait for the display to count down to 0. If the calibration zero is accepted, the display will read CAL FS. If the display reads CAL 0, repeat the zero point calibration process.

NOTE: If Er nno appears during the calibration count down, the scale is in motion. All vibrations and air currents must be removed from the scale platform to complete the calibration process.

NOTE: If Er nEg appears on the display, the calibration zero is out of range. Press ZERO to clear the error. Refer to the A/D Ranging section for additional information.

The span point can be calibrated using any weight between 2% and 100% of scale capacity. To perform the span calibration, place the calibration weight on the platform. Press UNITS to select between full scale capacity (FS), 75% (.75), 50% (.50), 25% (.25), 20% (.20) and 10% (.10). Alternatively, you can press PRINT and scroll to the desired weight using PRINT and UNITS. When the desired weight is selected, press ZERO to perform a span calibration. Wait for the display to count down to 0. If the span calibration is successful, the display will return with donE.

code entry and enter the normal run mode. The front panel access feature during power-up is not available when the Operating Mode (oP) parameter is set to 44S.

b) To enter the calibration mode, press and hold the UNITS and ZERO buttons until the parameter review starts (C and P are displayed). Press the HIDDEN (Capacity Label) button after Cap aj and the capacity is displayed. The display will momentarily read Ent Cd, and then go blank. Press the ZERO button five times. The display will indicate the number of times the ZERO button has been pressed. When 5 is displayed, press the UNITS button and wait a few seconds. Note: If the code is not entered before the timer is finished, the scale will bypass code entry and enter the normal run mode. The front panel access feature during power-up is not available when the Operating Mode (oP) parameter is set to 44S.

c) The calibration switch can be accessed by removing the meter's back cover. With the indicator powered on, press the CAL switch (S1), located in the lower left corner of main board. Pressing the CAL switch also exits the setup mode and saves any changes. **Warning**: do not press the CAL switch while powering up scale, this will cause the scale to reset all parameter settings.

Completing Calibration:

1) Select Scale Capacity

When the setup mode is accessed, the first parameter displayed is the capacity parameter. The capacity parameter toggles the display between CAP Aj and the current capacity. The capacity can be expressed in lb or kg. The UNITS annunciator to the right of the weight display will indicate either lb or kg. The calibration and capacity setup unit is defined by the startup units Units parameter setting.

To change the capacity, press ZERO. The right most digit will flash. Press ZERO until the flashing digit has the desired value. Press UNITS to select the next digit to the left. Once entered, press UNITS until the display reads Cnt by.

Chapter 1 - Overview

This Quick Start Guide is designed for use by installers and users of the HI8000 Series Intrinsically Safe Instrumentation that have a high degree of familiarity with Hardy Process Solutions products.

The Quick Start Guide provides basic procedures for installing, configuring, and operating a HI8000 Series Intrinsically Safe Instrumentation. For detailed information about installation, use, maintenance and troubleshooting; please refer to the full manual located on Hardy's website.

WWW.HARDYSOLUTIONS.COM
>PRODUCTS
>WEIGHING INSTRUMENTS
>Intrinsically Safe Instruments
>HI 800IS Series

All documents are under the Docs & Programs tab.

Direct Link:

https://www.hardysolutions.com/products/weighing-instruments/intrinsically-safe-instruments/product/536/hi-8000is-series

Chapter 2 - Specifications

UL File Number	E243588
UL Certificate Number	E243588-20191209
Enclosure	304 Stainless Steel
Product Dimensions	10” W x 6.75” H x 3.5” D
Environmental Protection	IP6X
Temperature Range	14 F to 104F (-10 C to +40 C) HI8CHG only: 14 F to 86 F (-10 C to +30 C)
Altitude	Up to 2000 meters
Resolution Range	200d to 100,000d
Humidity	Maximum relative humidity 95%, non-condensing
Pollution Degree	2
Analog Signal Sensitivity	0.16 μV/e minimum, 0.5 μV/e typical
System Linearity	0.01% full scale
Analog Signal Range	-0.5mV/V to 5 mV/V with 4 and 6 wire input
Excitation Voltage	5 VDC
Number of Load Cells	Up to 4 350 Ohm, 4 or 6 wire
Scale Inputs	One
Calibration Range	Calibrate between 2% and 100% of capacity
Power Input	100 VAC 50/60Hz
Battery Option	Rechargeable Sealed Lead Acid Battery Charging time 36 for 8 hours of continuous use, 1000 recharge cycles
Display	1" high, 6 digit backlit LCD

Chapter 3 – Installation

Warning: **Scale system installations must conform to the Control Drawing 0594-0013.**

Install the unit in the Hazardous area according to Control Drawing 0594-0013 located on Hardy’s Website.

Start by connecting the indicator to the HI8BIS or HI8AIS power supplies with supplied cabling only.

For scales with battery:

Turn on the scale by pressing the ZERO button.
To turn off, press and hold the ZERO push button until the display shows "rEL Pb." Then release the ZERO button and the scale will turn off.

The scale will turn off automatically when the scale is stable for a period of time defined by the Unit On Timer parameter. The default setting is 30 seconds.

Chapter 4 – Calibration

To calibrate the HI8100IS indicator, you must access the setup mode. Any of the three methods below can be utilized.

NOTE: Hardy IS Instruments are not C2® enabled.

a) To enter the calibration mode, power up the indicator while pressing and holding the ZERO and the UNITS buttons. When rEL Pb is displayed, release both buttons. The display will momentarily read Ent Cd, and then go blank. Press the ZERO button five times. The display will indicate the number of times the ZERO button has been pressed. When 5 is displayed, press the UNITS button and wait a few seconds. Note: If the code is not entered before the timer is finished, the scale will bypass