

Ultegra MAX

SCB-R9050 Series 21 x 21 Bench Scale



Amendment Record

Ultegra MAX 21 x 21 Bench Scale SCB-R9050 Series Document 51244

Manufactured by Fairbanks Scales Inc.

821 Locust

Kansas City, Missouri 64106

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Revision 1	06/2010	Released Manual
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Revision 3	07/2013	Corrected Accessory Remote Display part number.
Revision 4	03/2014	Added Gravity Use Compensation information



Disclaimer

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Section 1: General Information

1.1. Introduction

The SCB-R9050 Series Bench Scale is a USB powered unit with a capacity of 250 lbs and is constructed of steel. The scale may be placed on a desk, or a bench. Units may be ordered with an optional roller ball surface.

1.2. Description

This unit can be powered from any PC that is compliant with version USB 1.1 or later. This includes external hubs, either bus-powered or self-powered. The scale is identified by a PC as a human interface device (HID) and operates with Windows 2000, Windows XP or later. It also can be powered from a 5VDC AC adapter. A USB port is not required when powered from an AC adapter.

-  NTEP Approved
-  Measurement Canada Approved
-  RoHS Compliant
lead-free

Section 2: Installation

2.1. Unpacking

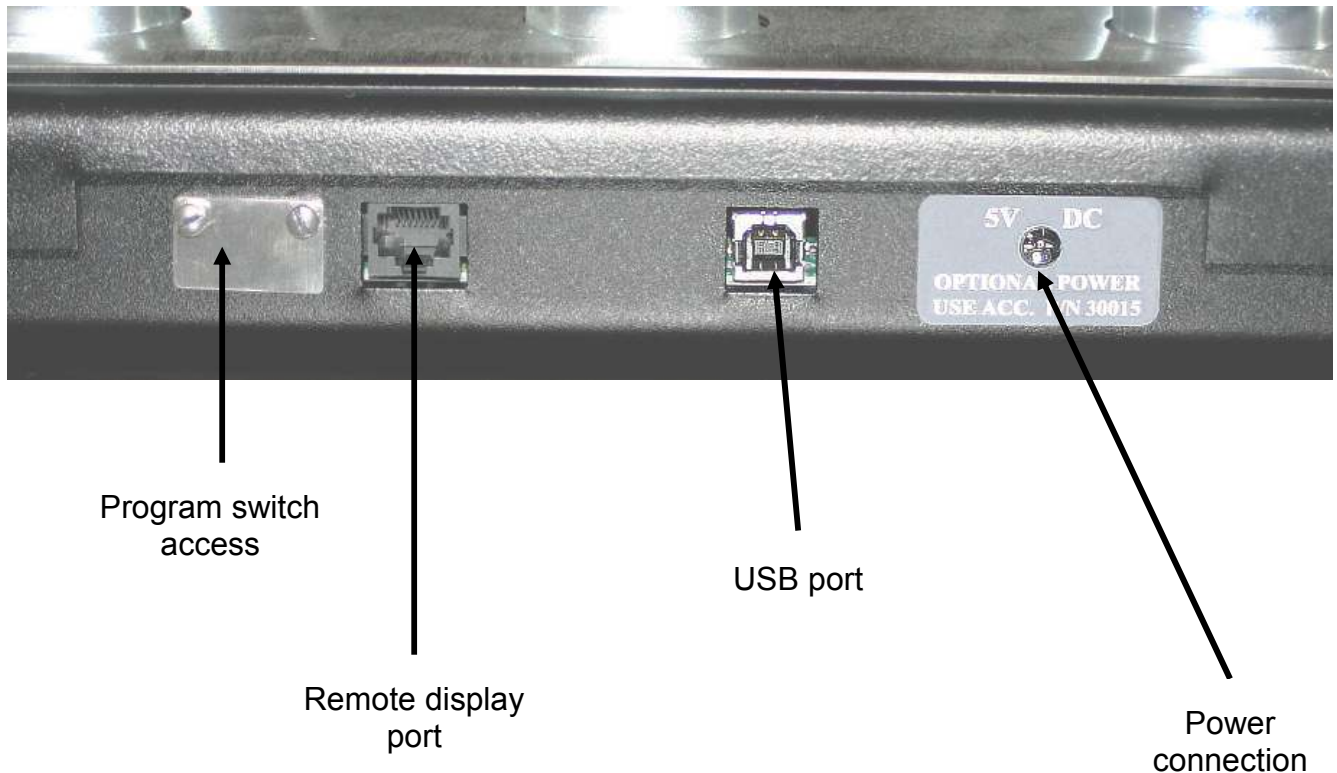
1. Remove the scale from the packing box and place on a flat surface where it will be used.
2. Using the bubble level, adjust one or two feet minimally to level the platform. Do NOT adjust all 4 feet.

2.2. Connections

1. **USB** - To use the USB interface, plug the included six foot (6') USB cable into the scale base where marked **USB port** in the diagram in **Section 2.3 Computer Connections**. Connect the other end into a USB port on your computer or USB hub.
2. **REMOTE DISPLAY** - To use a remote display, plug the remote display into the connector on the scale base where indicated **Remote Display port** in the diagram under **Section 2.3 Computer Connections**. Mount the remote using 2 screws or use a Velcro® strip (not included).
A remote display pillar is also available.
3. **AC ADAPTER** - To use an AC adapter, plug the barrel plug into the back of the scale where marked **optional power**, and the AC adapter unit into a proper outlet. Check the AC receptacle for proper voltages prior to plugging in the adapter.
4. **Check with your shipping software provider** for compatible computer software.

2.3. Computer Connections

1. **USB setup:** The USB port will only function with a computer utilizing Windows 2000, Windows XP, or higher operating system. When the scale-connected USB cable is interfaced to a computer's USB port or USB hub, the computer will prompt ***a device has been found*** and it will automatically install the driver.



2.4. Gravity Use Compensation Setting

The SCB-R9050 has a gravity use compensation setting which must be set based upon the geographical zone in which the scale is being installed.

Access this setting by pressing the Program button. The button is located looking at the front of the scale inside the right rear portion of the scale. An access cover must be removed.



1. The display will show **GrU x**. This is the **Gr**avity **U**se Zone. Select the proper zone number for your location. Use the **[UNITS]** key to toggle to the selection. The choices are:

-8, -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Zone	Latitude (degrees)	Reference City
-8	68.659	Point Hope, AK
-7	64.929	Fairbanks, AK
-6	61.567	Anchorage, AK
-5	58.444	Fort Vermilion, Alberta
-4	55.485	High Prairie, Alberta
-3	52.638	Coventry, England
-2	49.865	Winnipeg, Manitoba
-1	47.137	Tacoma, WA
0	44.427	St. Johnsbury, VT
1	41.711	Des Moines, IA
2	38.963	Kansas City, MO
3	36.156	Tulsa, OK
4	33.257	Tuscaloosa, AL
5	30.223	Austin, TX
6	26.992	Navojoa, Mexico
7	23.467	Mazatlan, Mexico
8	19.476	Mexico City
9	14.622	Guatemala City
10	7.326	Bucaramanga, Colombia

Press the **[ZERO]** key to accept the choice selected and the display will indicate **AZt 0.5**. Press the Program button to return to the weighing mode.

This completes setting the **Gr**avity **U**se Zone setting.

Section 3: Operation

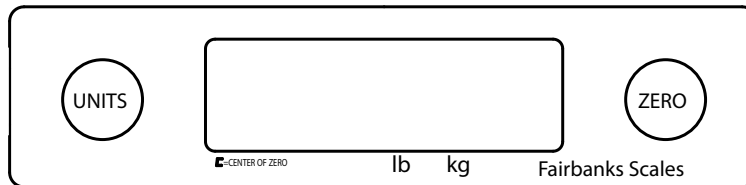
3.1. Power-on

Because the scale uses special low-power circuitry, no warm-up time is required. Weight readings will be accurate as soon as the unit is powered on and set to zero.

When the unit is powered, the liquid crystal display (LCD) will show the software part number and the revision followed by either "0.00", or "-----". Dashes are displayed to indicate the scale is registering a weight upon startup. Press **[ZERO]** to set the display to '0.00' and start weighing.

3.2. Keys

The keys for operating the scale are located on the main display and on the remote display.



1. Pressing the **[ZERO]** key resets the display to indicate zero (0).
 - The zero range is set at 2% or 5.00 lbs. when set for Canadian use.
 - The zero range is set at 100% or 250 lbs. when set for USA use.
2. The **[ZERO]** key function will be inhibited if the instrument detects any of the following conditions:
 - Motion on the platform
 - An underload condition
 - An overload condition
 - Outside of programmed zero range
3. Pressing the **[UNITS]** key toggles the weighing units and annunciators between "lb" and "kg". Verify the units you want to use by noting the arrow indicator on the display.

3.3. Weighing

1. With the platform empty, press the **[ZERO]** key. The display will indicate zero (0).



Note:

The “C” to the left of the “0.00” indicates true center of zero.

2. Check that the correct units are indicated; press the **[UNITS]** key to change to “lb” or “kg”.
3. Place the item to be weighed in the center of the platform.
4. Read the Gross weight from the display.



Section 4: Customer Care

4.1. Cleaning

Clean by wiping the scale assembly off with a damp cloth only. Do not use running water, harsh chemicals, or allow liquids to drip onto the scale/ display.

4.2. Operator Instrument Prompts

Prompt	Description
<i>H ,CAP</i>	Applied load is greater than 250 lbs/ 113 kg - over capacity.
<i>LoCAP</i>	Scale is below normal Zero range - under capacity.
- - - - -	Indicates the scale is not within the center-of-zero range. Press [ZERO] to go to weigh mode.
- - - - -	Motion is preventing the scale from entering weigh mode

4.3. Troubleshooting

In the event the scale does not function properly, check the following, see appendix for more information:

Problem	Possible Source / Remedy
No Display	Power OFF, plug disconnected, cord damage, faulty USB port or AC adapter. IF you are using a remote display, check the main display first, if it's OK then check the cable plug connection on the remote. Unplug then plug in the power cord to reset the program.
Incorrect Weight	Check platform for binding or rubbing, reposition scale so all sides are clear. Ensure correct UNITS are displayed (lb or kg). Remove load, press the [ZERO] key to set the scale to '0.00', then reweigh.
[ZERO] key will NOT reset zero	Motion on the platform; ensure that the platform is empty. Check platform for binding or rubbing, reposition scale
Pushbuttons Will Not Operate	First unplug, then plug in the power cord to reset the program. If you are using a remote display, check the main display first, if it's OK then check the cable and plug connection on the remote.
Display Locked or Inoperative	First unplug, then plug in the power cord to reset the program. If you are using a remote display, check the main display first, if it's OK then check the cable and plug connection on the remote.
Display Indicates <i>H I CAP</i>	Weight on the platform exceeds 250 lbs, remove load.
No USB Output	Check that both cable end connectors are securely fastened. Check the cable for damage. Check the Hub or USB port for problems.

Section 5: Specifications

5.1. Technical Specifications

1. **Capacities:** 250 lb/113 kg factory set
2. **Rounding:** Nearest division per NIST H-44
3. **Weight Display:** .50 inch LCD Display
4. **Power On Lockout:** Scale will display "-----", when power is turned on and weight is present. Press ZERO to establish zero reference.
5. **Display update rate:** 0.05 seconds.
6. **Overcapacity Warning:**
 - Displays "HiCAP" for overcapacity
7. **Motion Detection:** Satisfies H-44 requirements
8. **Power Failure Protection:** Zero reference, programming, and calibrations are retained if the instrument loses power
9. **Load Cell Excitation:** 3.3VDC
10. **USB Cable Length:** Type A/B, 6 feet in length
11. **Indicators:**
 - lb, kg
12. **Dimensions:** Platform, Including Feet 20" x 20" x 2.5" (flat top)
20" x 20" x 3.5" (roller top)
13. **Auto Zero Tracking:** Compensates for gradual buildup of material on platform, factory set at 0.5 divisions
14. **Power Requirements:** 5VDC, USB or AC adapter
15. **Approvals:** NTEP CC# 10-055;
MC# AM-5785
RoHS Complaint

5.2. Environment

All equipment should be protected from direct sunlight.

- Relative Humidity 0% to 90% non-condensing.
- NOT suitable for water wash down.

5.3. Accessories

1. **Remote Display 29595C** - (ACC-1520-1)
6.98"W x 3.48"H, 1.29"D, RJ45 cable and two (2) function buttons.



2. **AC Adapter 30015** - Input voltage range of 90 to 264 VAC, 47 to 63 Hz. Output, 5VDC via 2.1mm barrel plug.



AC Adapter 30015

3. **Remote Display Stand 20301** - A 18" high stand for mounting the Remote Display, ideal for counter-top applications.



Remote Display Stand 20301



Manufactured by Fairbanks Scales, Inc.
821 Locust Street
Kansas City, MO 64106

www.fairbanks.com

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