



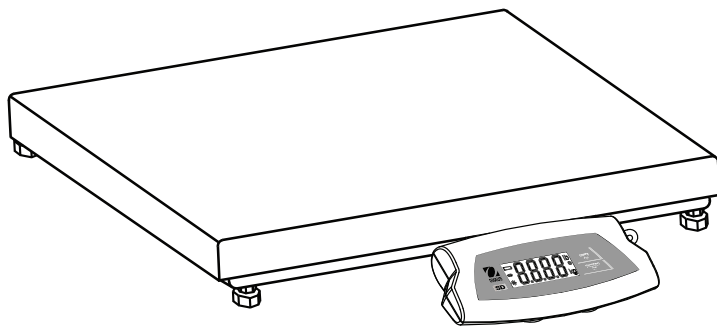
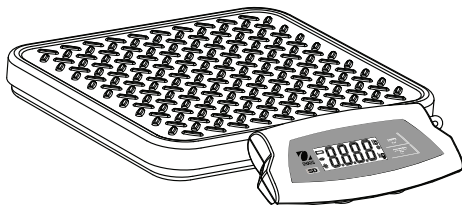
**SD Series Bench Scale**

**Báscula de mesa de la serie SD**

**Balance de table Série SD**

**Tischwaage der SD-Serie**

**Bilancia da banco serie SD**







This product conforms to the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC.

The complete Declaration of Conformity is available from Ohaus Corporation.

Este producto está en conformidad con la Directriz EMC 89/336/EEC y con la Directriz para Bajo Voltaje 73/23/EEC.

La Declaración de Conformidad completa está disponible a través de Ohaus Corporation.

Ce produit est conforme à la directive EMC 89/336/EEC et à la directive de basse tension 73/23/EEC.

Vous pouvez obtenir une déclaration complète de la conformité auprès de Ohaus Corporation.

Dieses Produkt entspricht der EMC-Richtlinie 89/336/EEC und der Niederspannungsrichtlinie 73/23/EEC.

Die vollständige Konformitätserklärung ist bei der Ohaus Corporation erhältlich.

Questo prodotto è conforme alla direttiva EMC 89/336/CEE e alla Direttiva Bassa Tensione 73/23/CEE.

La dichiarazione di conformità completa è disponibile presso gli uffici della Ohaus Corporation.

### Disposal

In conformance with the European Directive 2002/96 EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.



Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.

If you have any questions, please contact the responsible authority or the distributor from which you purchased this device.

Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related.

Thank you for your contribution to environmental protection.

### Eliminación de residuos

De conformidad con las exigencias de la directiva europea 2002/96 CE sobre residuos de aparatos eléctricos y electrónicos (RAEE), este equipo no puede eliminarse como basura doméstica. Esta prohibición es asimismo válida para los países que no pertenecen a la UE cuyas normativas nacionales en vigor así lo reflejan.



Elimine este producto, según las disposiciones locales, mediante el sistema de recogida selectiva de aparatos eléctricos y electrónicos.

Si tiene alguna pregunta al respecto, diríjase a las autoridades responsables o al distribuidor que le proporcionó el equipo.

Si transfiere este equipo (por ejemplo, para la continuación de su uso con fines privados, comerciales o industriales), deberá transferir con él esta disposición. Muchas gracias por su contribución a la conservación medioambiental.

### Elimination

En conformité avec les exigences de la directive européenne 2002/96 CE relative aux déchets d'équipements électriques et électroniques (DEEE), cet appareil ne doit pas être éliminé avec les déchets ménagers. Logiquement, ceci est aussi valable pour les pays en dehors de l'UE conformément aux réglementations nationales en vigueur.



Veuillez éliminer cet appareil conformément aux prescriptions locales dans un conteneur séparé pour appareils électriques et électroniques.

Pour toute question, adressez-vous aux autorités compétentes ou au revendeur chez qui vous avez acheté cet appareil.

En cas de remise de cet appareil (p. ex. pour une utilisation privée ou artisanale/industrielle), cette prescription doit être transmise en substance.

Merci pour votre contribution à la protection de l'environnement.

### **Entsorgung**

In Übereinstimmung mit den Anforderungen der Europäischen Richtlinie 2002/96 EG über Elektro- und Elektronik-Altgeräte (WEEE) darf dieses Gerät nicht mit dem Hausmüll entsorgt werden. Sinngemäss gilt dies auch für Länder ausserhalb der EU entsprechend den geltenden nationalen Regelungen.



Bitte entsorgen Sie dieses Produkt gemäss den örtlichen Bestimmungen in einer getrennten Sammlung für Elektro- und Elektronikgeräte.

Bei allfälligen Fragen wenden Sie sich bitte an die zuständige Behörde oder den Händler, bei dem Sie dieses Gerät erworben haben.

Bei Weitergabe dieses Gerätes (z.B. für private oder gewerbliche/industrielle Weiternutzung) ist diese Bestimmung sinngemäss weiterzugeben.

Vielen Dank für Ihren Beitrag zum Schutz der Umwelt.

### **Smaltimento**

In conformità a quanto stabilito dalla Direttiva Europea 2002/96 CE in materia di apparecchi elettrici ed elettronici (RAEE), questo strumento non può essere smaltito come i normali rifiuti. Tale presupposto resta valido anche per i Paesi al di fuori dei confini della UE, conformemente alle norme nazionali in vigore.



Si prega quindi di smaltire questo prodotto separatamente e in modo specifico secondo le disposizioni locali relative alle apparecchiature elettriche ed elettroniche.

Per qualsiasi chiarimento, rivolgersi agli enti preposti o al rivenditore dell'apparecchiatura stessa.

In caso di cessione dello strumento (per es. per ulteriore utilizzo privato o aziendale/industriale), si prega di comunicare anche questa disposizione.

Si ringrazia per il contributo alla tutela dell'ambiente.

### **FCC Note**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

### **Industry Canada Note**

This Class B digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.



**EMC Australia / New Zealand: AS/NZS4251.1, AS/NZS4252.1**

### **ISO 9001 Registration**

In 1994, Ohaus Corporation, USA, was awarded a certificate of registration to ISO 9001 by Bureau Veritas Quality International (BVQI), confirming that the Ohaus quality management system is compliant with the ISO 9001 standard's requirements. On May 15, 2003, Ohaus Corporation, USA, was re-registered to the ISO 9001:2000 standard.

### **Registro ISO 9001**

En 1994, Bureau Veritas Quality International (BVQI) le otorgó a Ohaus Corporation, EE.UU., un certificado de registro ISO 9001 el cual confirma que el sistema administrativo de calidad de Ohaus cumple con los requerimientos del estándar ISO 9001. En mayo 15 del 2003, Ohaus Corporation, EE.UU., fue registrada nuevamente al estándar ISO 9001:2000.

### **Enregistrement ISO 9001**

En 1994, le Bureau Veritas Quality International (BVQI) a octroyé la certification d'enregistrement ISO 9001 à Ohaus Corporation, États-Unis d'Amérique, confirmant que le système de gestion de la qualité Ohaus était conforme aux conditions normalisées de l'ISO 9001. Le 15 mai 2003, Ohaus Corporation, États-Unis d'Amérique, a été ré-enregistrée à la norme ISO 9001:2000.

### **Registrierung nach ISO 9001**

Im Jahr 1994 wurde der Ohaus Corporation, USA, ein Zertifikat der Registrierung nach ISO 9001 vom Bureau Veritas Quality International (BVQI) verliehen, in dem bestätigt wird, dass das Ohaus-Qualitätsmanagementsystem den Anforderungen der Norm ISO 9001 entspricht. Am 15. Mai 2003 wurde die Ohaus Corporation, USA, gemäß der Norm ISO 9001:2000 neu registriert.

### **Registrazione ISO 9001**

Nel 1994, Ohaus Corporation, USA, ha ricevuto il certificato di registrazione ISO 9001 da Bureau Veritas Quality International (BVQI), come conferma che il sistema di gestione della qualità Ohaus risponde alle caratteristiche standard di ISO 9001. Il 15 Maggio 2003, Ohaus Corporation, USA, è stata riregistrata per la normativa ISO 9001:2000.

## **Ohaus SD Series Bench Scale**

### **INSTRUCTION MANUAL**

- The contents of this manual applies to all models of the SD Series Bench Scale.
- Calibration weights are not provided with this product.
- For best results, use the product within the specified operating temperature range.
- For best accuracy, perform your measurements in a clean environment, free of electrostatic and magnetic fields, dust and dirt, moisture, vibration and air currents.
- Use your SD Series Bench Scale with care, gently loading items to be weighed on the center of the platform. Avoiding rough treatment will aid in extending the life of your Scale.

## Introduction

This manual covers operation for the Ohaus SD Series Bench Scales.

## Unpacking

SD Series Bench Scale is shipped with the following components:

- Indicator
- Scale Base
- Mounting Brackets
- AC Power Adapter
- This Instruction Manual
- Warranty Card

## Leveling Scale Platform

The Scale Base should be placed on a level, stable surface before operation. Models SD75L and SD200L are equipped with adjustable leveling feet. Adjust the four leveling feet under the platform to level it.

## Power Options

### AC Adapter Operation

- The AC Adapter (included) may be used to power the system when battery power is not available.
- Check that the AC input power as marked on the Adapter matches the available power source.
- Connect the round plug of the AC Adapter to the power input jack at the side of the Indicator housing. See Figure 1.
- Plug the AC Adapter into an AC power outlet.

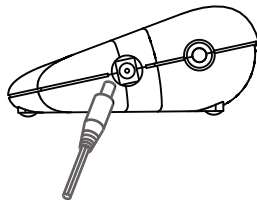


Figure 1. Connecting Adapter Plug to Indicator.



## Battery Installation (Optional)

- Open the battery cover on the bottom of the Indicator and install three “C” size (LR14) alkaline batteries into the compartment. Orient the batteries as shown on the inside cover. Close the battery cover.

**NOTE:** Batteries are not included.

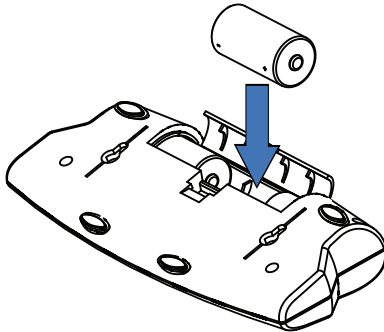


Figure 2. Battery Installation.



**CAUTION: Do not dispose of used batteries in domestic waste. Follow the proper disposal or recycling requirements in accordance with local laws and regulations.**

## Indicator Mounting and Placement Options

- **Table Top Placement:**

The Indicator may be placed on a flat table surface without additional hardware. Four rubber feet provide reduced slippage on most surfaces.

- **Direct Wall Mounting:**

The Indicator may be mounted directly to a wall using two screws (not included). Select appropriate size screws that fit into the holes at the bottom of the Indicator housing. See Figure 3. When mounting to a wall without a solid backing, use appropriate anchoring hardware.

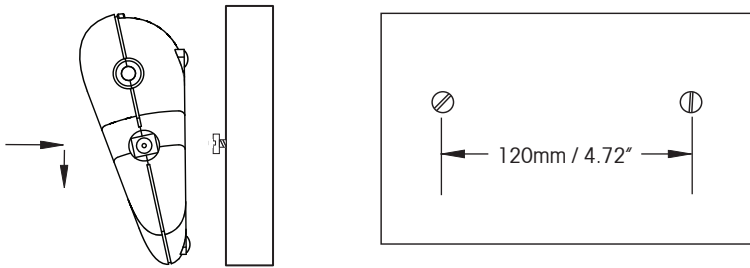


Figure 3. Direct Wall Mount Arrangement.

• **Bracket Wall Mounting/Table Mounting:**

Attach the two mounting brackets as shown in Figure 4. Position the Indicator where desired on the wall or table. Install 2 screws (not supplied) into the ends of each bracket to secure them to the surface. When mounting to a wall without solid backing, use appropriate anchoring hardware.

**MOUNTING NOTES:**

1. When attaching brackets: Insert round pins into holes at bottom of Indicator, slide each bracket back to lock in place.
2. Mounting brackets may be attached in two different orientations to provide optimum viewing angle.
3. Some mounting positions may require that the brackets be attached to the work surface before being attached to the indicator.

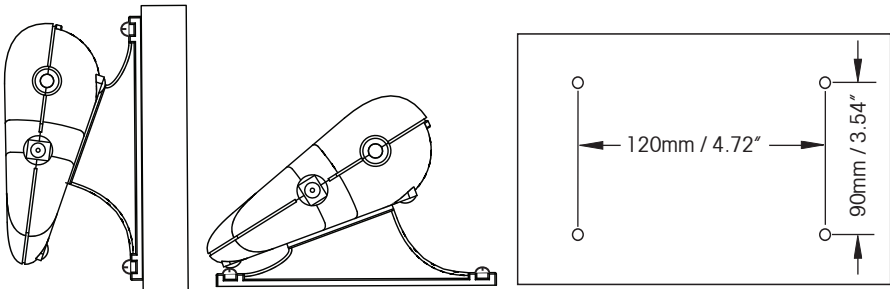


Figure 4. Bracket Wall & Table Mount Arrangements.

## Product Features & Operation




Figure 5. Indicator Panel Controls.

### Two Button Keypad

- **ON/ZERO Off:** A short press turns on the scale when it is off. When the scale is on, a short press zeroes the scale, and a long press turns the scale off.
- **UNITS Cal:** A short press changes the weighing unit and weighing mode. A short press initiates countdown during Dynamic Weighing Mode. A long press initiates the calibration process.

### Display Window

- **Large 7-Segment Numeric Characters:** Weight (mass) values are shown using 4 digits including negative sign and decimal places. Prompts for calibration and possible error conditions are also shown using these digits.
- **Stable Reading Indication:** A \* will appear in the lower left corner of the display to indicate when the reading is stable.
- **Weighing Unit Indication:** The weighing unit selected appears on the right side of the display.
- **Dynamic Weighing Mode Indication:** A • will flash next to the selected unit during this mode.

- **Low Battery Indication:** The battery symbol on the left side of the display  indicates a low battery condition. When first displayed, approximately 12 hours of operation remain. When the battery is fully depleted, the scale will momentarily display "Lo bAt" and shut off.

## Operation

- **Power Up Test:** When the **ON/ZERO Off** button is pressed, the scale is turned on, all display segments will appear for a short time, followed by the software version. The display will then reset to zero.
- **Zero Function:** By pressing the **ON/ZERO Off** button, the scale display returns to zero. When adding additional mass, the **ON/ZERO Off** button may be used repeatedly until the full capacity of the scale is reached. When a container is used, the **ON/ZERO Off** button may be used to simulate a Tare function. Additional mass may then be added as a NET weight. When removing both the sample and container from the scale, a negative value may be displayed. Zero the scale again before subsequent usage.

**NOTE:** The **ON/ZERO Off** button will perform a true zero setting function when displayed values are within  $\pm 2\%$  of full capacity. Above 2%, the range is limited to full capacity by subtraction.

- **Negative Values:** When a load is removed from the scale, any previously zeroed value will be displayed as a negative number. To return to normal operation, the negative value is cleared from the display by pressing the **ON/ZERO Off** button.
- **Overload:** If the applied load exceeds the capacity of the scale, an "E" is displayed. Remove the load and the scale will return to normal operation.

- **Auto Shut-Off:** To extend battery life, the scale will automatically turn off after approximately four minutes of inactivity. This feature is only active during battery operation.

## Dynamic Weighing

1. With platform empty, press the **UNITS Cal** button until the indicator • flashes next to the desired measuring unit.



2. Place a mass on the platform. The scale will show "-A-".

**NOTE:** If using a container, press **ON/ZERO Off** to tare the weight and return to zero.



3. With a mass on the platform or container, a short press of **UNITS Cal** will start the averaging countdown from 5 seconds.



4. The averaged weight is then displayed. The indicator • stops flashing when the process is complete.



5. The display will hold until a button is pressed.
6. To repeat the process press **UNITS Cal** with a mass on the platform or container.
7. To Exit, remove the mass from the platform or container and press **UNITS Cal**.

## Calibration

For best results, calibrate the scale at regular intervals. (Calibration weights are not supplied with the scale.)

### CAUTION



**USE EXTREME CARE WHEN HANDLING CALIBRATION WEIGHTS AS THEY ARE VERY HEAVY. IMPROPER LIFTING METHODS OR MISUSE OF CALIBRATION WEIGHTS MAY RESULT IN PERSONAL INJURY. MULTIPLE WEIGHTS MAY BE USED TO EQUAL THE REQUIRED CALIBRATION WEIGHT.**

1. Allow the scale to warm up and stabilize for a least two minutes before commencing the calibration procedure.
2. To select the weighing unit to be used for calibration, press the **UNITS Cal** button until the correct unit is displayed.

**NOTE:** The calibration process can be stopped at any time by pressing the **UNITS Cal** button or by turning the scale off. The correct span calibration weights will need to be available before starting the calibration (see specification table). Calibration is unavailable in Dynamic Weighing Mode.

3. Press and hold the **UNITS Cal** button until "CAL" is displayed.



4. With the platform empty, press the **ON/ZERO Off** button to capture the scale zero. The display will show "-C-"



5. After the zero is captured, the required span calibration weight in the selected unit is displayed.



6. Place the calibration weight on the platform and press **ON/ZERO Off** button. The display will again show "-C-".



7. After span capture, the display will return to the normal weighing mode.



**NOTE:** The message "CAL E" will appear if an incorrect calibration weight was applied. Repeat the procedure using the correct calibration weight.

**Calibration Locking:** By use of an internal switch, the calibration function may be locked (disabled), and unauthorized recalibration prevented.

1. With the scale powered off, remove the back housing section of the indicator by unscrewing the four screws at the bottom.
2. Slide the switch on the PCB (marked SW3) to the position marked "CAL LOCK".
3. Reassemble the housing.
4. If required, place tamper evident sealing labels over the screw holes or over the housing edges.

If later recalibration is required, the housing will need to be reopened and the lock switch returned to the original position.

**NOTE:** When the lock switch is set to the CAL LOCK position, the power-on zero range is reduced to 10% of full capacity.

**Specifications (Standard Base Models)**

<b>Model</b>	<b>SD35</b>	<b>SD75</b>	<b>SD200</b>
Capacity x Readability	35 x 0.02kg 77 x 0.05lb	75 x 0.05kg 165 x 0.1lb	200 x 0.1kg 440 x 0.2lb
Weighing Units	kg, lb		
Modes	Simple Weighing, Dynamic Weighing		
Calibration Weights	25kg/50lb	50kg/100lb	100kg/200lb
Stabilization Time	Within 3 seconds		
Zero Range	To capacity by subtraction		
Maximum Overload	150%		
Error Indications:	<ul style="list-style-type: none"> <li>"E" - Over load, Under load, Power on Over/Under load</li> <li>"CALE" - Calibration Error</li> <li>"UnSt" - Unstable at Power on</li> <li>"ErrE" - Memory Error</li> <li>"Lo bat OFF" - Low battery shut down</li> <li>"Lo Line OFF" - Low line voltage shut down (Power Adapter)</li> </ul>		
Underload Indication	Negative value		
Auto Shut-Off	4 minutes no activity (battery operation only)		
Battery Operating Time	360 hours		
Operating Temperature Range	41° to 104° F / 5° to 40°C at 10% to 80% relative humidity, non-condensing		
Cable Length	1.8m / 72" (uncoiled)		
Display	4 Digit, LCD, 0.8"/20mm high		
Scale Base Size	316mm L x 280mm W x 45mm H / 12.4" x L x 11" W x 1.77" H		
Indicator Size	210mm L x 91mm W x 39mm H / 8.27" L x 3.58" W x 1.54" H		
Battery power requirements	3 "C" Alkaline batteries (LR14)		
AC Adapter	9-12 Volt DC, 100mA		
Net Weight	2.6kg / 5.8lb	3.3kg / 7.3lb	
Shipping Weight	3.7kg / 8.1lb	4.3kg / 9.5lb	
Shipping Carton Size	380mm L x 100mm W x 465mm H / 15" L x 3.94" W x 18.3" H		



**Specifications (Large Base Models)**

<b>Model</b>	<b>SD75L</b>	<b>SD200L</b>
Capacity x Readability	75 x 0.05kg 165 x 0.1lb	200 x 0.1kg 440 x 0.2lb
Weighing Units	kg, lb	
Modes	Simple Weighing, Dynamic Weighing	
Calibration Weights	50kg/100lb	100kg/200lb
Stabilization Time	Within 3 seconds	
Zero Range	To capacity by subtraction	
Maximum Overload	150%	
Error Indications:	<ul style="list-style-type: none"> <li>"E" - Over load, Under load, Power on Over/Under load</li> <li>"CALE" - Calibration Error</li> <li>"UnSt" - Unstable at Power on</li> <li>"ErrE" - Memory Error</li> <li>"Lo bat OFF" - Low battery shut down</li> <li>"Lo Line OFF" - Low line voltage shut down (Power Adapter)</li> </ul>	
Underload Indication	Negative value	
Auto Shut-Off	4 minutes no activity (battery operation only)	
Battery Operating Time	360 hours	
Operating Temperature Range	41° to 104° F / 5° to 40°C at 10% to 80% relative humidity, non-condensing	
Cable Length	1.8m / 72" (uncoiled)	
Display	4 Digit, LCD, 0.8"/20mm high	
Scale Base Size	520mm L x 400 mm W x 75 mm H / 20.5" L x 15.7" W x 3" H	
Indicator Size	210mm L x 91mm W x 39mm H / 8.27" L x 3.58" W x 1.54" H	
Battery power requirements	3 "C" Alkaline batteries (LR14)	
AC Adapter	9-12 Volt DC, 100mA	
Net Weight	14kg / 31lb	
Shipping Weight	15.5kg / 34lb	
Shipping Carton Size	600mm L x 480mm W x 230mm H / 24" L x 19" W x 9" H	

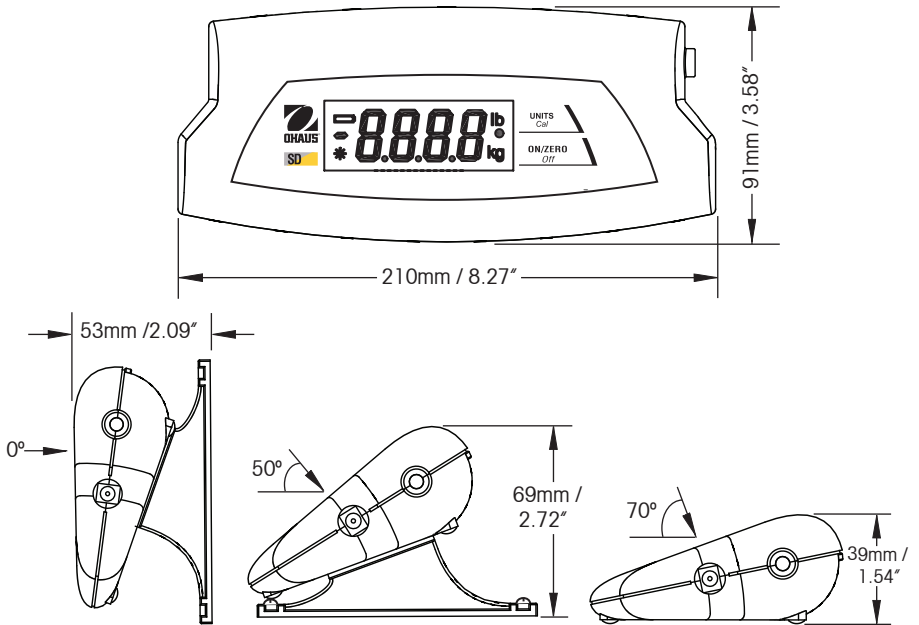


Figure 5. Indicator Overall Dimensions, Available Viewing Angles.

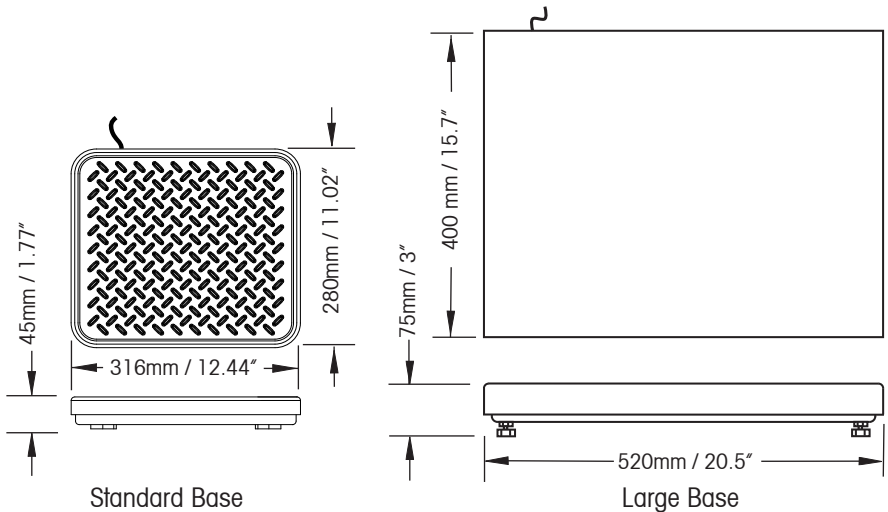


Figure 6. Scale Base Overall Dimensions.

## **LIMITED WARRANTY**

Ohaus products are warranted against defects in materials and workmanship for duration of the warranty. During the warranty period Ohaus will repair, or, at its option, replace any components) that proves to be defective at no charge, provided that the product is returned, freight prepaid, to Ohaus. This warranty does not apply if the product has been damaged by accident or misuse, exposed to radioactive or corrosive materials, has foreign material penetrating to the inside of the product, or as a result of service or modification by other than Ohaus. In lieu of product registration, the warranty period shall begin on the date of shipment to the authorized dealer. No other express or implied warranty is given by Ohaus Corporation. Ohaus Corporation shall not be liable for any consequential damages. As warranty legislation differs from state to state and country to country, please contact Ohaus or your local Ohaus dealer for further details.