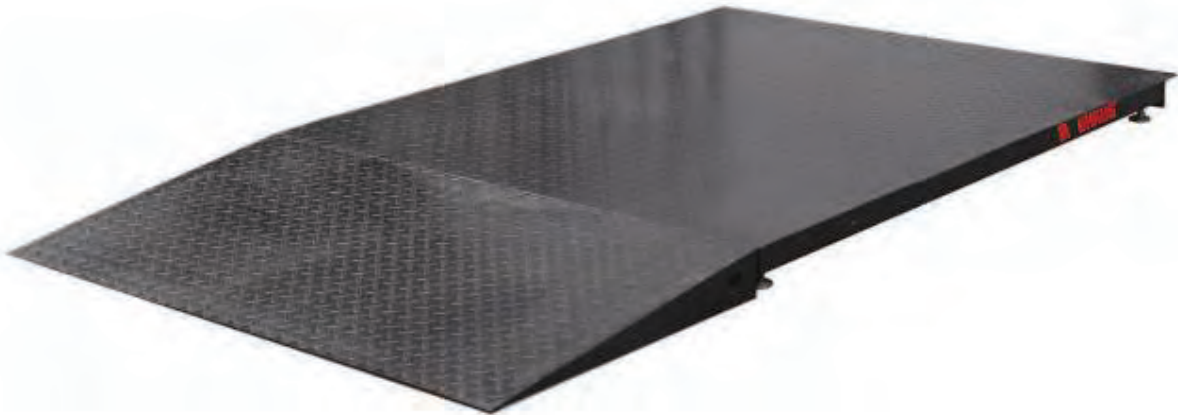




**VN Series Floor Scale  
Instruction Manual**

**Báscula para piso serie VN  
Manual de instrucciones**

**Balance au sol Série VN  
Manuel d'instructions**



## INTRODUCTION

This manual contains installation, operation and maintenance instructions for the VN Series Floor Scale.

## SAFETY PRECAUTIONS



Please follow these safety precautions:

- Never operate in hazardous areas.
- The VN Series may be used in dry environments only.
- The foundation at the installation site must be capable of safely supporting the weight of the floor scale plus the weight of the maximum load.
- Ensure that vibrations due to machines near the installation site are kept to a minimum. This applies also when the floor scale is integrated into conveying systems.

## INSTALLATION



**CAUTION: THE FLOOR SCALE IS VERY HEAVY. ALWAYS USE AN APPROPRIATE HOIST TO LIFT IT FROM THE PACKAGING OR TO MOVE IT INTO THE REQUIRED POSITION.**

### Unpacking

1. Remove the outer packaging materials from the top and sides of the floor scale.
2. Install the two included eye bolts into opposing sides of the floor scale, see Figure 1.
3. Lift the floor scale from the packaging material, see caution notice.

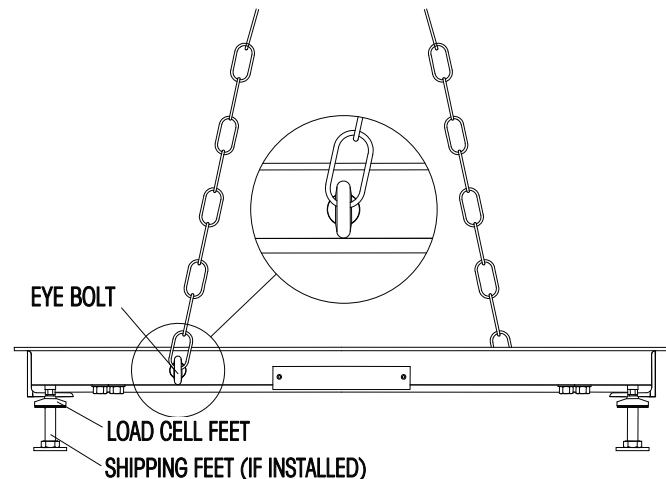


Figure 1. Hoisting Method.

## Positioning

Ensure the surface is flat in the area where the scale will be positioned, especially in the region of the load cell feet. Small differences in height can be compensated by adjusting the load cell feet.

1. If an Indicator is included with the floor scale ensure that it is kept with the floor scale during positioning as there may be an attached connecting cable.
2. With the floor scale positioned over the final work area, remove the 4 shipping feet (if installed).
3. Install the 4 load cell feet (if not already installed).
4. Lower the scale on to the final work area.
5. Check that the floor scale is level; check that the 4 feet are in contact with the floor; make adjustments by rotating the nuts on the load cell feet. Use an external level.
6. Ensure that the floor scale's output cable does not become trapped or crushed during lifting or positioning.

## Foot Plates

Foot Plates (available separately) mount around the feet of the Floor Scale and prevent movement of the scale. Installation of Foot Plates must be done before final placement of the Floor Scale. Refer to the section on Accessories for Foot Plate installation.

## Connecting an Indicator

Certain Floor Scale systems will have an Indicator already attached to the cable end. If the Indicator is not attached or if the Indicator is purchased separately follow the steps listed below to make the proper connections.

1. Route the Floor Scale cable to the position where the Indicator will be mounted.
2. Consult the installation instructions of the Indicator to properly attach the cable connections inside the Indicator,
3. The Signal names of the Floor Scale wires are shown in Table 1, Floor Scale Wiring Color Code.

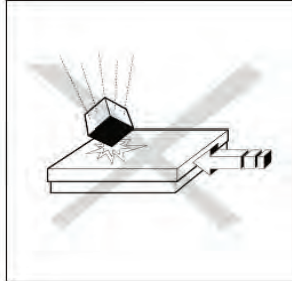
**CAUTION:** Ensure that the cable is protected against possible damage when routed to the Indicator.

**TABLE 1. FLOOR SCALE WIRING COLOR CODE**

Indicator Signal Name	Floor Scale Wire Color
EXC+ (IN+)	Green
SEN+	Yellow
SIG+ (OUT+)	White
SIG- (OUT-)	Red
SEN-	Blue
EXC- (IN-)	Black
Shield (GND)	Yellow/Green

## OPERATION

For setup, calibration and proper operation, refer to the instruction manual supplied with the indicator. Refer to the specifications section of the floor scale for capacity, and readability information.



For continued best operating performance:

- Avoid falling loads, shocks and hard lateral impacts
- When weighing, all items should be centrally located on the floor scale and not over hanging the sides or the ramps.
- Verify the calibration of the floor scale system at regular intervals.

## Operating Limits

Although the floor scales have extremely rugged construction, certain load limits must not be exceeded. Depending on the type of loading, the maximum safe static load, i.e. the maximum admissible loading, is shown in Table 2.

**TABLE 2. MAXIMUM ADMISSIBLE LOADING.**

Model	Maximum Central load <sup>1</sup> (80% Surface Area)	Maximum Side load <sup>2</sup> (30% Surface Area)	One Side Corner Load <sup>3</sup> (10% Surface Area)	
VN5000L	8000 lb	5000 lb	2600 lb	
VN5000X	8000 lb	5000 lb	2600 lb	

## SEALING METHODS

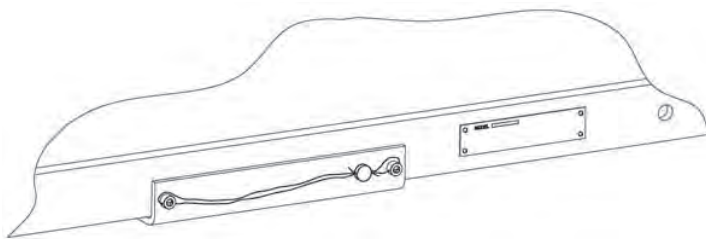


Figure 2. Sealing Method 1

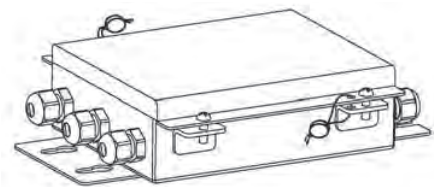


Figure 3. Sealing Method 2

## MAINTENANCE

### Daily Checks

- Check that the feet are properly seated in the holes of each load cell.
- Check that the 4 feet are in contact with the floor.
- Check that the scale is free from debris, especially under the edges of the scale.
- Check that there is no damage to the connecting cable.

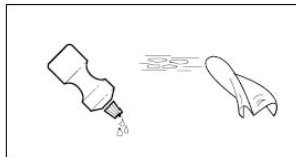
### Cleaning



#### Risk of Electrical Shock

**Disconnect the power source before cleaning the scale with any liquids.**

Maintenance of the floor scale is limited to regular cleaning.



- Wipe surfaces with a damp cloth.
- Use only common household cleaning agents.
- Never use water spray or high pressure cleaners.
- Keep the air gap at the edge of the Floor Scale free of debris.

## TECHNICAL DATA

### Specifications

**TABLE 3. FLOOR SCALE SPECIFICATIONS**

Floor Scale Models	VN5000L	VN5000X
Dimensions	4' x 4' x 3.5" / 1220 x 1220 x 90mm	5' x 5' x 3.5" / 1524 x 1524 x 90 mm
Capacity x $\theta_{min}$	5000 lb x 1 lb / 2200 kg x 0.5 kg	
Material	Painted Carbon Steel, treaded surface, fixed top plate	
Feet	4 x swivel design, rubber bottom, adjustable height	
Load Cell	4 x Shear Beam, Alloy Steel, NTEP	
Load Cell Capacity $E_{max}$	2500 lb	
Load Cell Safe Overload Limit	120% of $E_{max}$	
Load Cell Output Impedance	350 $\Omega$	
Load Cell Excitation Voltage	5V ~15V, DC/AC	
Junction Box	Side panel access, IP65, Stainless Steel, with 16' / 5m Cable	
Operating Temperature	14°F to 104°F / -10 °C to 40 °C	
Humidity	0% to 95% Relative Humidity, Non-Condensing	
Net Weight	271 lb / 123 kg	408 lb / 185 kg

### Accessories

**TABLE 4. LIST OF ACCESSORIES**

Item	Part Number
Foot Plate Kit, Painted Steel	72198344
Ramp Kit, 48", Painted Steel, for VN5000L	80252565
Ramp Kit 60", Painted Steel, for VN5000X	80252566

- Notes: 1. Foot Plate Kits include 2 Foot Plates, Mounting Hardware  
 2. Ramp Kits include 1 Ramp, 2 Foot Plates, Mounting Hardware

Dimensions

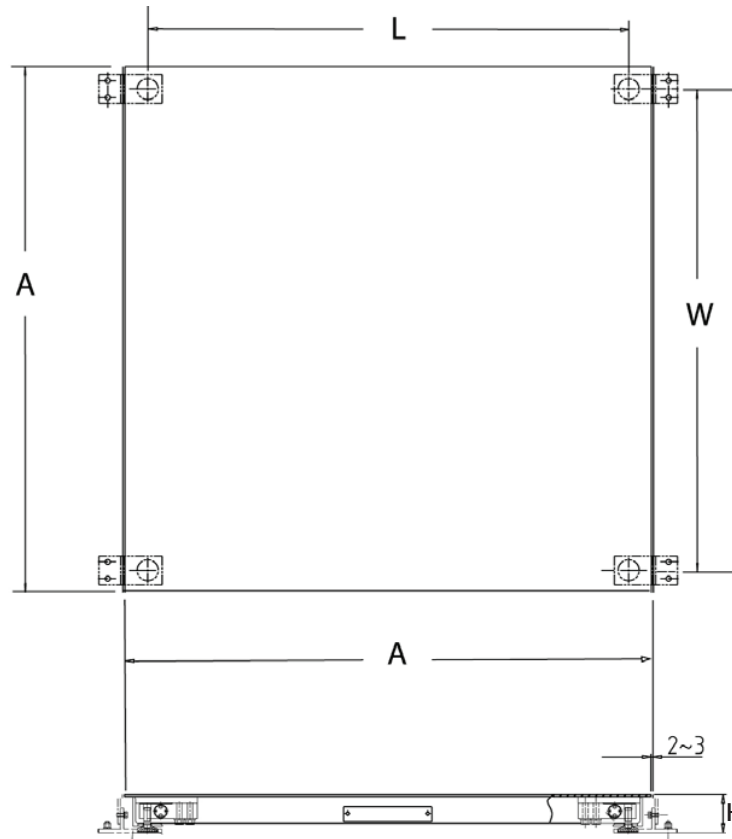


Figure 4. Floor Scale Dimensions, (Shown with optional Foot Plates)

TABLE 5. FLOOR SCALE DIMENSIONS

MODELS	DIMENSIONS			
	FLOOR SCALE PLATFORM		FOOT CENTERS	
	A	H (min)	W	L
VN5000L	4' / 1220 mm	3.5" / 90 mm	43.7" / 1110 mm	43.7" / 1110 mm
VN5000X	5' / 1524 mm	3.5" / 90 mm	55.7" / 1414 mm	55.7" / 1414 mm

### INSTALLATION OF OPTIONAL FOOT PLATES AND RAMPS

Installation of each Ramp also requires the installation of one set of Foot Plates. Foot Plates are available separately and are included with the Ramp accessory kit. Refer to Figure 5 for mounting of the Foot Plates and Ramps. Installation of Floor Plates and Ramps must be done before final placement of the Floor Scale.

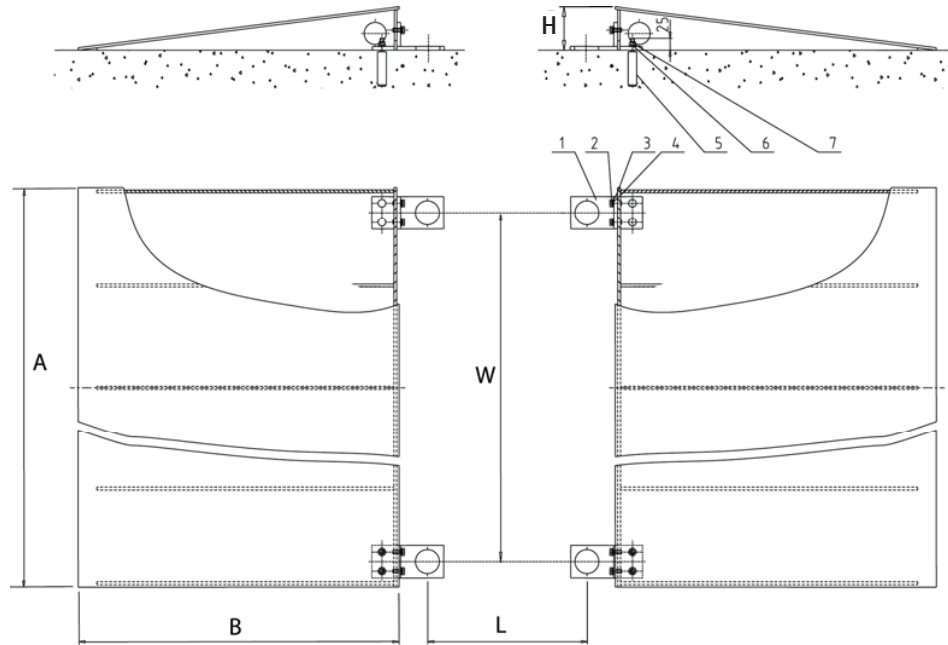


Figure 5. Optional Foot Plate and Ramp Installation

**LEGEND:** 1. Foot Plate, 2. Bolt, 3. Spring Washer, 4. Washer, 5. Expanding Bolt, 6. washer, 7. Nut

- Notes:
1. Expanding bolts require 12.5mm (0.5”) diameter holes drilled 60mm (2.4”) deep into the floor surface.
  2. Foot Plate center to center dimensions W and L are shown in Table 6.
  3. The Floor Scale must be positioned so that the load cell feet rest within the large holes of the Foot Plates.
  4. Ensure that a free air gap exists between the sides of the Floor Scale and the edges of the Ramps.

**TABLE 6. DIMENSIONS FOR FLOOR PLATE AND RAMP INSTALLATION**

MODELS	DIMENSIONS				
	RAMP			FOOT PLATE CENTERS	
	A	B	H	W	L
Ramp for VN5000L	4' / 1220 mm	26.4" / 670 mm	3.56" / 90.5mm	43.7" / 1110 mm	43.7" / 1110 mm
Ramp for VN5000X	5' / 1524 mm	26.4" / 670 mm	3.56" / 90.5mm	55.7" / 1414 mm	55.7" / 1414 mm



## Conformance



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.

### 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.

For disposal instructions in Europe, refer to [www.ohaus.com/weee](http://www.ohaus.com/weee).

### 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.

## LIMITED WARRANTY

Ohaus products are warranted against defects in materials and workmanship from the date of delivery through the duration of the warranty period. During the warranty period Ohaus will repair, or, at its option, replace any component(s) 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 a properly returned warranty registration card, 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.