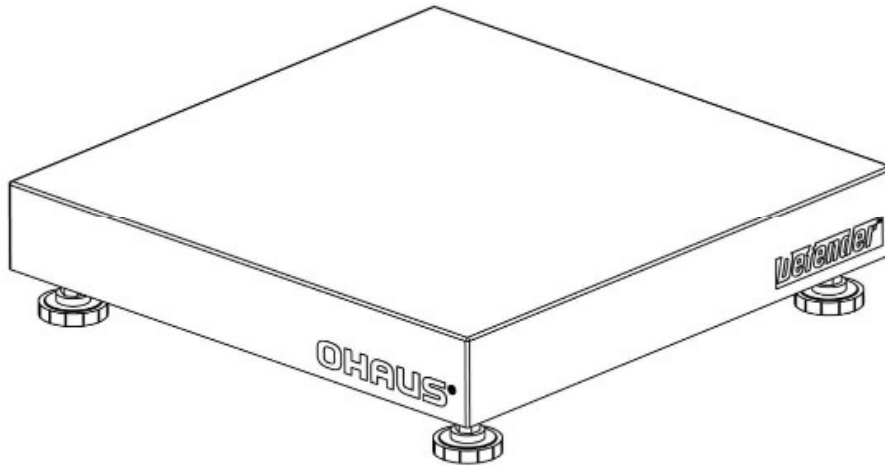




# Defender™ 6000 Series Base Instruction Manual



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# INTRODUCTION

This manual covers installation, and maintenance instructions for the OHAUS Defender™ Series Base. Please read this manual completely before installation and operation.

## SAFETY PRECAUTIONS

For safe and dependable operation of this product, please comply with the following precautions:



- Operate the base only under ambient conditions specified in these instructions
- Ensure that the load cell cable does not pose an obstruction or tripping hazard
- Do not operate the base in hazardous environments or unstable locations
- Do not drop loads on the base
- Do not lift the base by the top frame; always lift from the bottom frame when moving the base
- Service should only be performed by authorized personnel

## INSTALLATION

### Unpacking

Unpack and inspect the product to make sure that all components have been included. The package includes the following:

- Defender™ Series Base
- Weighing Pan
- Instruction Manual

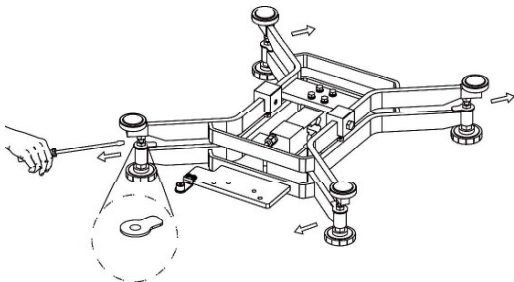
When purchased as a complete Defender Series Scale, the package will also include:

- Indicator
- Column Assembly

## ASSEMBLY

### Weighing Pan

Remove the shipping spacers, and place the weighing pan securely over the rubber load pads on the top frame of the base.



**Note:** Not included with some models

### Wiring Connections

When connecting the base to an OHAUS indicator equipped with the matching circular connector, push the base connector onto the indicator connector and turn the locking ring clockwise to lock it in place.

When connecting the base to an indicator that does not have the matching connector, install the optional load cell cable adapter (P/N 30429931 sold separately) to the indicator using the wiring codes in Table 1. Then attach the load cell cable to the cable adapter.

**Note:** As an alternate wiring method, cut off the connector, strip the wires and attach them to the indicator using the wiring codes in Table 1.

The extension cable accessory (P/N: 30429931) cannot be used if the scale will be used in a legal for trade or legally controlled application, because there is no provision to seal the connection between the indicator and platform.

TABLE 1. LOAD CELL CONNECTION

Type1. For model i-D3K1S, i-D6K1S, i-D15K1R, i-D30K1R, i-D60K1L bases

FUNCTION	WIRE COLOR
+ Excitation	Blue
- Excitation	Black
+ Signal	White
- Signal	Red
+ Sense	Green
- Sense	Grey
Shield	Yellow

Type2. For model i-D150K1L base

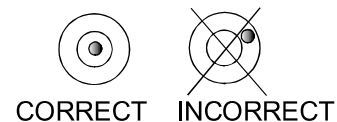
FUNCTION	WIRE COLOR
+ Excitation	Green
- Excitation	Black
+ Signal	White
- Signal	Red
+ Sense	Light Yellow
- Sense	Blue
Shield	Deep Yellow

## Selecting the Location

To ensure accuracy, proper performance and safety, locate and operate the base on a stable, level surface. Avoid locations with rapid temperature changes or excessive dust, air currents, vibrations, electromagnetic fields or heat.

Level the base by adjusting the four leveling feet until the bubble in the level indicator is centered. A wrench may be needed to loosen the locking nut above each leveling foot. When the base is level, retighten the locking nuts up against the base to lock each foot into place.

Note: Ensure that the base is level each time its location is changed.



## MAINTENANCE

### Cleaning

The base components should be kept clean and free of excessive material build up.

- A damp cloth with water and a mild detergent may be used to wipe clean the external surfaces – do not use acids, alkalis, strong solvents or abrasive materials.

To maintain surface integrity, do not allow debris to remain on the surface of the painted or stainless steel base frame.

- Remove the pan and use fresh water to clean the base frame surface of any debris. Dry the base with a clean cloth or allow to air dry before replacing the pan. Repeat daily for best care.

## Troubleshooting

Aside from installing components and leveling adjustments, the Defender Series Base does not require any other adjustments as shipped from the factory.

Operational difficulties that may be encountered can often be traced to simple causes such as:

- Loose or incorrect wiring connections
- Failure to remove the shipping spacers
- Obstructions to the base frame
- Unstable environments
- Incorrect calibration or setup of the indicator

If the troubleshooting section does not resolve or describe your problem, contact your authorized OHAUS service agent. For service assistance or technical support in the United States, call toll-free 1-800-526-0659 between 8:00 AM and 5:00 PM EST. An OHAUS product service specialist will be available to provide assistance. Outside the USA, please visit our web site, [www.ohaus.com](http://www.ohaus.com) to locate the OHAUS office nearest you.

## TECHNICAL DATA

### Technical Specifications

The technical data is valid under the following ambient conditions:

Operating temperature: -10°C to +40 °C (14 °F to 104 °F)

Relative humidity: 100% relative humidity, non-condensing

Altitude: Up to 2,000m

**Note:** Not all models may be available in your area. Check with your local OHAUS representative.

**TABLE 2.1 SPECIFICATIONS**

MODEL	i-D3K1S	i-D6K1S	i-D15K1R	i-D30K1R	i-D60K1L	i-D150K1L
Capacity	3 kg	6 kg	15 kg	30 kg	60 kg	150 kg
Approved Resolution	OIML 3000e					
Safe Overload Capacity	150% of capacity					
Pan Dimensions	254 x 254 mm 10 x 10 in		305 x 305 mm 12 x 12 in		400 x 500 mm 15.7 x 19.6 in	
Base Construction	316 stainless steel top and bottom frame, hermetically sealed IP68/IP69K stainless steel loadcell.				316 stainless steel removable weighing platform with 316 stainless steel frame, hermetically sealed IP68/IP69K stainless steel loadcell.	
Repeatability (std.deviation)	2d					
Linearity	±2d					
Load Cell Capacity	10 kg	10 kg	20 kg	50 kg	100 kg	200 kg
Load Cell Cable	50cm L x 6-wire				1m L x 6-wire	
Load Cell Type	350 Ohm, SST, single point					
Load Cell Excitation	3.3-15V DC/AC					
Load Cell Rated Output	2mV/V					
Load Cell Protection	IP69K					
Net Weight	6 kg / 13.2 lb		7.5 kg / 16.5 lb		16 kg / 35.3 lb	
Shipping Weight	7 kg / 15.4 lb		8.5 kg / 18.7 lb		18 kg / 39.7 lb	

## Drawings

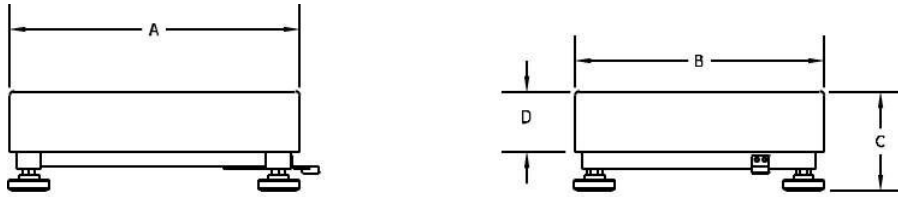


Figure 1. Defender Base Dimension Drawing.


**TABLE 3. DIMENSIONS**

Base	A	B	C	D
	Pan Depth	Pan Width	Height of Pan to Surface of Table	Height of Pan
i-DxxxKxS	254 mm	254 mm	106 mm	N/A
i-DxxxKxR	305 mm	305 mm	106 mm	N/A
i-DxxxKxL	400 mm	500 mm	136.5 mm	80 mm

\*For leveling purposes, the feet may be extended up to an additional 15 mm.

## COMPLIANCE

Compliance to the following standards is indicated by the corresponding mark on the product.

Mark	Standard
	This product complies with the applicable harmonized standards of EU Directives 2011/65/EU (RoHS). The EU Declaration of Conformity is available online at <a href="http://www.ohaus.com/ce">www.ohaus.com/ce</a> .
	This product complies with the EU Directive 2012/19/EU (WEEE). Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment. For disposal instructions in Europe, refer to <a href="http://www.ohaus.com/weee">www.ohaus.com/weee</a> .

### ISO 9001 Registration

The management system governing the production of this product is ISO 9001 certified.

## ACCESSORIES

**TABLE 4. ACCESSORIES**

Part Number	Description
30616409	Wheel Kit, Defender Series
30626654	Mounting Set Front SST
30572907	External power bank sealing kit
30424409	Cable Extension 9m D52
30429931	Cable Kit Extension for base
30572908	Column Kit 260mm 316 D61
30572909	Column Kit 670mm 316 D61

## 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





# INTRODUCCIÓN

Este manual describe instrucciones de instalación y mantenimiento para la base de la serie Defender™ de OHAUS. Lea completamente este manual antes de la instalación y funcionamiento.

## PRECAUCIONES DE SEGURIDAD

Para una operación segura y confiable de este producto, respete las siguientes precauciones:



- Opere la base solamente bajo las condiciones ambientales especificadas en estas instrucciones
- Asegúrese de que el cable de la celda de carga no represente un riesgo de obstrucción o de tropiezo
- No utilice la base en entornos peligrosos o en lugares inestables
- No deje caer cargas sobre la base
- No levante la base por medio de la parte superior del marco, levántela siempre por medio de la parte inferior al mover la base
- Cualquier reparación y servicio debe ser realizado solo por personal autorizado

## INSTALACIÓN

### Desembalaje

Desembale e inspeccione el producto para asegurarse de que incluye todos los componentes. El paquete contiene lo siguiente:

- Base de la serie Defender™
- Plato de pesaje
- Manual de instrucciones

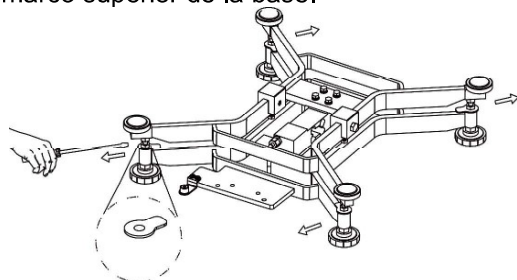
Si es adquirida como una báscula de la serie Defender, el paquete también contiene:

- Indicador
- Unidad de columna

## MONTAJE

### Plato de pesaje

Retire los espaciadores de envío y coloque el plato de pesaje firmemente sobre las almohadillas de caucho en el marco superior de la base.



Nota: No incluido con algunos modelos.

### Conexiones del cableado

Al conectar la base a un indicador OHAUS equipado con el correspondiente conector circular, empuje el conector de la base en el conector del indicador y gire el anillo de bloqueo para asegurarlo.

Si conecta la base a un indicador que no tenga el conector correspondiente, instale el adaptador opcional del cable de la celda de carga (P/N 30429931 vendido por separado) para el indicador utilizando los códigos de cableado en la tabla 1. A continuación conecte el cable de la celda de carga al adaptador del cable.

Nota: Como un método de cableado alternativo, corte el conector, pele los cables y conéctelos al indicador utilizando los códigos de cableado en la tabla 1.

El cable de extensión accesorio (P/N: 30429931) no puede utilizarse si la báscula va a tener un uso comercial legal o una aplicación controlada legalmente, ya que no existe disposición para sellar la conexión entre el indicador y plataforma.

**TABLA 1. CONEXIÓN DE LA CELDA DE CARGA**

Tipo 1. Bases i-D3K1S, i-D6K1S, i-D15K1R, i-D30K1R, i-D60K1L

FUNCIÓN	COLOR DEL CABLE
+ Excitación	Verde
- Excitación	Negro
+ Señal	Rojo
- Señal	Blanco
+ Detección	Azul
- Detección	Marrón
Blindaje	Amarillo

Tipo2. Bases i-D150K1L

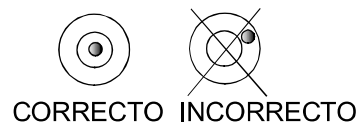
FUNCIÓN	COLOR DEL CABLE
+ Excitación	Verde
- Excitación	Negro
+ Señal	Blanco
- Señal	Rojo
+ Detección	Azul
- Detección	Marrón
Blindaje	Amarillo

## Seleccionar la ubicación

Para garantizar la precisión, funcionamiento correcto y seguridad, coloque y opere la base sobre una superficie estable y nivelada. Evite los lugares con cambios rápidos de temperatura o exceso de polvo, corrientes de aire, vibraciones, campos electromagnéticos o calor.

Nivele la base ajustando los cuatro pies de nivelación hasta que la burbuja en el indicador de nivel quede centrada. Puede ser necesaria una llave para aflojar la tuerca de seguridad situada sobre cada pie de nivelación. Cuando la base esté nivelada, apriete las tuercas de seguridad contra la base para bloquear cada pie en su lugar.

Nota: Asegúrese de que la base esté nivelada cada vez que cambie su ubicación.



## MANTENIMIENTO

### Limpieza

Los componentes de la base deben mantenerse limpios y libre de acumulación excesiva de material.

- Puede utilizar un paño humedecido con agua y un detergente suave para limpiar las superficies externas, no use ácidos, álcalis, disolventes fuertes o materiales abrasivos.

Para mantener la integridad de la superficie, no permita que haya suciedad en la superficie pintada o de acero inoxidable de la estructura de la base.

- Retire el plato y utilice agua fresca para limpiar la superficie de la estructura de la base. Para secar la base, utilice un paño limpio o deje secar al aire antes de reemplazar el plato. Repetir diariamente para mantener un buen cuidado.