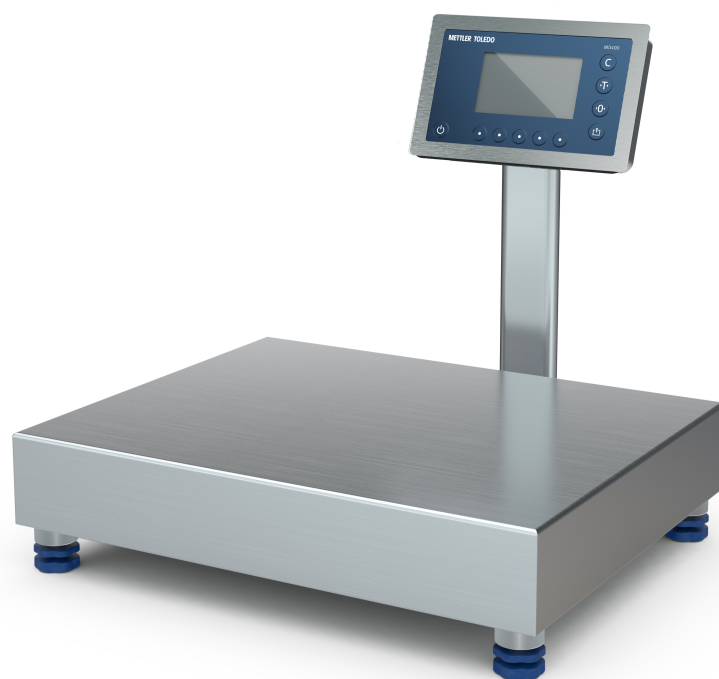


# BBA639/BBD659 Series

English Quick Guide Combi Bench Scale  
简体中文 快速使用指南 组合台秤



**METTLER TOLEDO**

## Manuals download

- EN Please use the link or scan the QR Code to download more manuals.
- CN 请使用链接或扫描二维码以下载更多手册。
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- FR Veuillez utiliser le lien ou scanner le code QR pour télécharger d'autres manuels.
- ES Utilice el enlace o escanee el código QR para descargar más manuales.
- PT Por favor, use o link ou escaneie o código QR para baixar mais manuais.
- IT Si prega di utilizzare il link o di scansionare il codice QR per scaricare ulteriori manuali.
- NL Gebruik alstublieft de link of scan de QR-code om meer handleidingen te downloaden.
- DA Brug venligst linket eller scan QR-koden for at downloade flere manualer.
- SV Vänligen använd länken eller skanna QR-koden för att ladda ner fler manualer.
- NO Vennligst bruk lenken eller skann QR-koden for å laste ned flere håndbøker.
- CS Prosím, použijte odkaz nebo naskenujte QR kód, abyste si stáhli další manuály.
- PL Proszę użyć linku lub zeskanować kod QR, aby pobrać więcej podręczników.
- HU Kérjük, használja a linket, vagy olvassa be a QR-kódot a további kézikönyvek letöltéséhez.
- TR Lütfen bağlantıyı kullanın veya QR kodunu tarayın ve daha fazla kılavuzu indirin.

► [www.mt.com/BBA639-BBD659-downloads](http://www.mt.com/BBA639-BBD659-downloads)



## 1 Safety Instructions

- READ this manual BEFORE operating or servicing this equipment.
- FOLLOW all instructions carefully, and SAVE this manual for future reference.



### WARNING

- 1 This device is an electrostatic sensitive equipment. Please take necessary electrostatic precautions when using and maintaining it.
- 2 Please ensure the device is grounded during the weighing process, otherwise static buildup may cause damage to the weighing platform or the items being weighed.



### WARNING

- 1 Before connecting the power supply, check whether the voltage value printed on the label corresponds to your local system voltage.
- 2 Do not, under any circumstances, connect the device if the voltage value on the label deviates from the local system voltage.
- 3 Make sure the weighing platform has reached room temperature before switching on the power supply.



### WARNING

- 1 To obtain safety instructions regarding the terminal, please refer to the IND400 Safety Instructions included in the package.
- 2 Only personnel trained and qualified by METTLER TOLEDO may install and maintain the equipment.
- 3 Be careful when transporting or lifting heavy devices.
- 4 Always disconnect the weighing platform from the power source before installing, servicing, cleaning or performing maintenance.
- 5 The connection cable may not be disconnected from the weighing terminal while energized.
- 6 The equipment is not designed for use in areas classified as hazardous because of combustible or explosive atmospheres. Do not install the device into an explosive environment!
- 7 Fully dry the scale regularly to prolong its service life.
- 8 Avoid falling loads, shocks and lateral impacts. Do not overload the scale.

### Disposal

In conformance with the European Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE), this equipment may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

Please dispose of this equipment 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 equipment. Should this equipment be passed on to other parties, the content of this directive must also be passed on to the other party.



### Compliance information

National approval documents, e.g. the FCC Supplier Declaration of Conformity, are available online and/or included in the packaging. ► [www.mt.com/ComplianceSearch](http://www.mt.com/ComplianceSearch)

### Feedback

We always strive to provide high-quality information and value your feedback. If you find ambiguous information or mistakes in this manual, please do not hesitate to let us know by e-mail.

► [feedback.manuals.industry@mt.com](mailto:feedback.manuals.industry@mt.com)

## 2 Introduction

### 2.1 Overview

BBA639/BBD659 Series Combi Bench consists of IND400 weighing terminal and PBA639/PBD659 series weighing platform. IND400 weighing terminals are part of a modular weighing system consisting of a METTLER TOLEDO weighing terminal as indicator and at least one weighing platform.

### 2.2 Technical Data

Parameter		Description	
		BBA639	BBD659
Approved Resolution Class III	OIML	3,000e, 2 x 3,000e	3,000e, 6,000e
	NTEP	5,000d	5,000d, 10,000d
Readabilities at max. resolution		30,000d	60,000d
Protection type		IP68/IP69K	
Scale interface		Analog	SICSpro
Materials		Stainless steel	
Display		High resolution touch graphic display, 5", 800 x 480 px	
Keypad		Membrane keyboard	
Power supply		Wide range power supply 100 - 240 V	
Ambient conditions		<ul style="list-style-type: none"> <li>• Application: Indoor use only</li> <li>• Altitude: Up to 2,000 m</li> <li>• Overvoltage category: II</li> <li>• Temperature range Class III: -10 ... 40 °C / 14 ... 104 °F</li> </ul>	
Protocols		SICS Server, SICS Continuous, Toledo Continuous-W, Toledo Continuous-C, Input Template, Second Display, Post, DigiTol, Demand Mode, PM, Remote Display, Reference Balance, Transfer, Parameter Server, PSCP, Modbus RTU / Modbus TCP	
Optional data interfaces		Up to 2 data interfaces (RS232, RS485, USB OTG, DIO, Wi-Fi, Ethernet)	
Optional applications		Over/Under, Counting, Manual Filling/Dosing, Totalization, Animal Weighing, Classification, Remote SQC, Data Integrity	
Accessories		Open column, Closed column, Tower column, Front mount bracket, Roller conveyor, Carbon steel cart, Stainless steel cart	

## 3 Installation

### 3.1 Unpacking

Verify the contents and inspect the package immediately upon delivery. If the shipping container is damaged, check for internal damage and file a freight claim with the carrier if necessary. If the container is not damaged, remove the scale from its protective package, noting how it was packed, and inspect each component for damage.

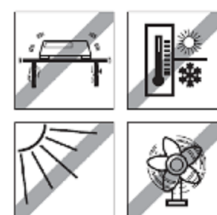
The package should include:

Item	QTY
BBA639/BBD659 Series Combi Bench	1
Quick Guide	1
Accessories	Based on order

### 3.2 Selecting the Installation Site

The correct location is important to the accuracy of the weighing results.

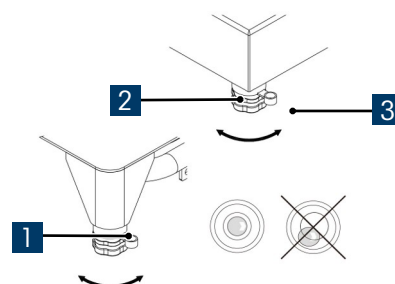
- The foundation at the installation site must be capable of safely supporting the total weight of the scale at its support points, when a maximum load is on the scale.
- Select a stable, vibration-free and horizontal location for the scale.
- Observe the following environmental conditions:
  - No direct sunlight
  - No strong drafts
  - No excessive temperature fluctuations



### 3.3 Leveling

The weighing platform is to be leveled after initial installation and location change.

- 1 Place the scale platform on a stable and level surface.
- 2 Make sure the level bubble (1) is in the center and each foot (2) firmly touch the ground (3).
- 3 Adjust the leveling feet if the level bubble is not in the center and/or any foot does not fully touch the ground.

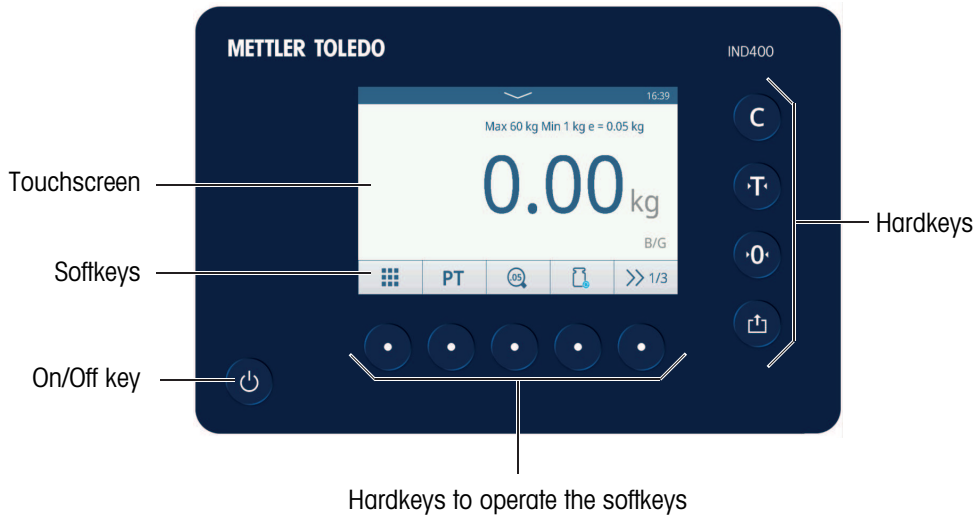


### 3.4 Installing the Column

- For installation of the open and closed column, please download Installation Manual from the website: [www.mt.com/BBA639-BBD659-downloads](http://www.mt.com/BBA639-BBD659-downloads).
  - ➔ PBA639 and PBD659 Open Column Installation Manual
  - ➔ PBA639 and PBD659 Closed Column Installation Manual



## 4 Device overview



### 4.1 Hard and softkeys

#### Hardkeys

The following hardkeys are available:



On/Off key



Clear



Tare



Zero



Print / transfer data

#### Softkeys

In the basic weighing application the following softkeys are available, separated in up to 3 softkey ribbons.



Select application



Pretare



Higher resolution



Switch unit



Scroll to the next softkey ribbon



Information



Open transaction table



Open tare table



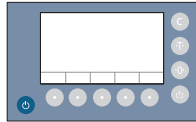
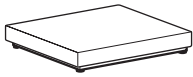
Open basic setup



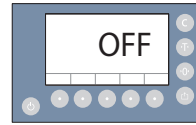
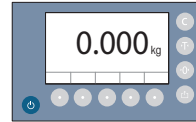
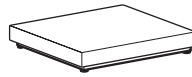
Open Quick setting menu

# 5 Basic Operation

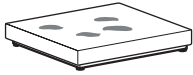
## Switch on



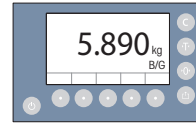
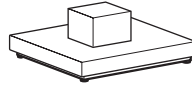
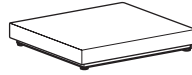
## Switch off



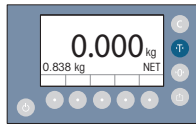
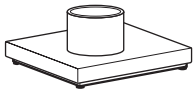
## Zero



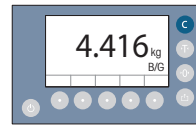
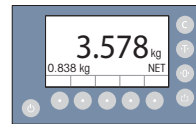
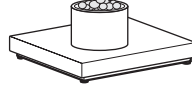
## Straight weighing



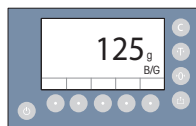
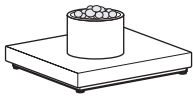
## Tare



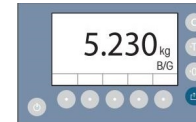
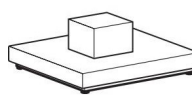
## Clear



## Switch weight unit



## Print or transfer data







## 1 安全说明

- 在操作或保养本设备之前，请阅读本手册，并严格按照其中的说明操作。
- 保留本手册，以供将来参考。



### 警告

- 1 本设备为静电敏感设备，在使用和维护中请注意采取静电措施。
- 2 在称重过程中请注意将设备接地，否则静电积聚可能导致损坏秤体或称重物品。



### 警告

- 1 连接电源之前，检查标签上印刷的电压值是否与当地系统电源一致。
- 2 如果标签上的电压值与当地系统电源不一致，则在任何情况下都不要连接该设备。
- 3 确保称重平台达到室温之后，再打开电源。



### 警告

- 1 关于称重终端的安全说明，请参考包装中的 IND400 安全说明手册。
- 2 只有接受 METTLER TOLEDO 培训和资格认证的人员才能安装和维护本产品。
- 3 在运输或举起重型设备时要小心。
- 4 在安装、维修、清洁或维护前，请务必断开称重秤台的电源。
- 5 连接电缆在通电时不得从称重终端断开连接。
- 6 本设备不适用于被归类为危险区域的场所，因为存在可燃或易爆环境。不要将本设备安装在易爆环境中！
- 7 定期将秤充分干燥，以延长其使用寿命。
- 8 避免落下负载、冲击和侧面碰撞。请勿超载。

### 废弃物处理

依照关于电气和电子设备废弃物（WEEE）的欧盟指令2012/19/EU，该设备不得作为生活废弃物进行处置。这也适用于欧盟以外的国家/地区，请按照其具体要求进行处置。

请遵照当地法规，在规定的电气和电子设备收集点处理本设备。如果您有任何疑问，请与主管部门或者您购买本设备的经销商联系。如果将本设备转交给其他方，则必须将本指令的内容一起传达给其他方。



### 合规性信息

国家审批文档（例如：FCC 供应商符合性声明）可在线获取和/或包含在包装中。

▶ [www.mt.com/ComplianceSearch](http://www.mt.com/ComplianceSearch)

### 客户反馈

我们一直致力于提供高质量的信息，非常重视您的反馈。如果您在本手册中发现了模糊不清的信息或错误，请通过电子邮件告知我们。

▶ [feedback.manuals.industry@mt.com](mailto:feedback.manuals.industry@mt.com)

## 2 简介

### 2.1 概述

BBA639/BBD659 组合台秤由 IND400 称重终端和 PBA639/PBD659 称重平台组成。IND400 称重仪表是模块化称重系统的一部分，该系统由作为显示仪的 METTLER TOLEDO 称重仪表和至少一个秤台组成。

### 2.2 技术参数

参数：	描述	
	BBA639	BBD659
检定分度值 III (OIML, CPA)	3,000e, 2 x 3000e	3,000e, 6,000e
防护类型	IP68 / IP69K	
秤体接口	模拟	SICSpro
材料	不锈钢	
键盘	薄膜键盘	
电源	电源范围宽, 100 – 240 V	
显示屏	高分辨率触摸图形化显示屏, 5", 800 x 480 px	
环境条件	<ul style="list-style-type: none"><li>• 超压类别: II</li><li>• 应用: 仅限室内使用</li><li>• 海拔: 最高 2,000 米</li><li>• 温度范围等级 III: -10 ... 40 °C / 14 ... 104 °F</li></ul>	
协议	SICS 服务器, SICS 连续, Toledo Continuous-W, Toledo Continuous-C, 输入模板, 第二显示屏, Post, DigiTol, 命令模式, PM, 远程显示屏, 天平, 传送, 参数服务器, PSCP, Modbus RTU / Modbus TCP	
可选数据接口	最多 2 个数据接口 (RS232, RS485, USB, DIO, Wi-Fi, 以太网)	
可选应用包	超载/欠载, 计数, 手动灌装/加样, 累计, 动物称重, 分类, 远程 SQC, 数据可靠性	
配件	开放式立柱, 封闭式立柱, 塔式立柱, 前置安装支架, 辊道台面, 碳钢推车, 不锈钢推车	

### 3 安装

#### 3.1 开箱

交付后应立即核实内容并检查包装。如果包装箱损坏，请检查包装内部是否损坏，必要时向承运人提出货运索赔。如果包装箱无损坏，将本秤从保护包装中取出，注意其包装情况，并检查每个部件是否有损坏。

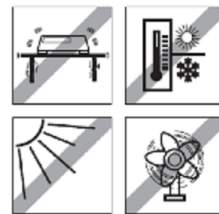
装箱清单应包括：

物品	数量
BBA639/BBD659 组合台秤	1
快速指南	1
附件	根据订单

#### 3.2 选择安装地点

是否安装在正确位置将影响称量结果的准确性。

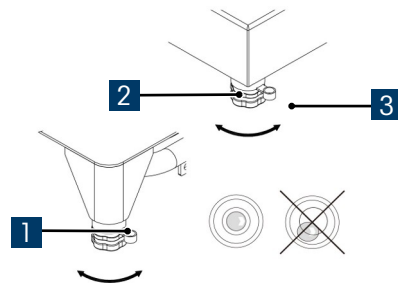
- 地面必须能够安全地承受秤台完全加载时的重量。
- 为秤台选择一个稳定的、无振动的、而且（如果可能的话）水平的位置。
- 遵守以下环境条件：
  - 避免阳光直射
  - 避免放置在风口
  - 无过大的温度波动



#### 3.3 调平

无论是首次安装，或者称重秤台位置发生变化，称重秤台都必须调平。

- 1 将秤台放在稳定、水平的表面上。
- 2 确保水平气泡（1）位于中心，并且每只脚（2）都牢牢地接触地面（3）。
- 3 如果水平气泡不在中心和/或任何支脚没有完全接触地面，请继续调平。



#### 3.4 安装立柱

- 如需安装开放式立柱和封闭式立柱，请从该网址下载安装手册：  
[www.mt.com/BBA639-BBD659-downloads](http://www.mt.com/BBA639-BBD659-downloads)
  - ➔ PBA639 and PBD659 Open Column Installation Manual
  - ➔ PBA639 and PBD659 Closed Column Installation Manual



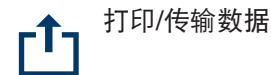
## 4 设备总览



### 4.1 硬键和软键

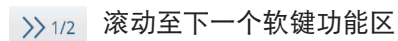
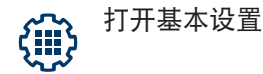
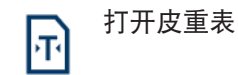
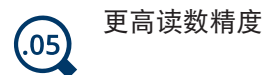
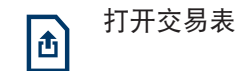
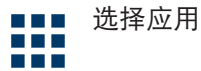
#### 硬键

提供以下硬键：



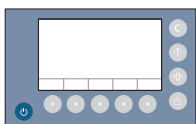
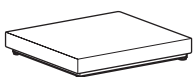
#### 软键

在基本称重应用中提供以下软键，最多分为 3 个软键功能区。

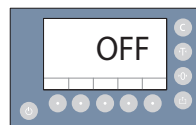
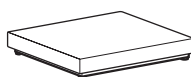


## 5 基本操作

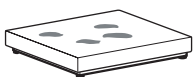
### 开机



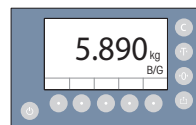
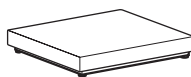
### 关机



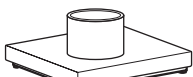
### 清零



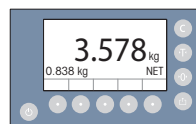
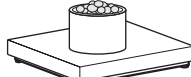
### 直接称重



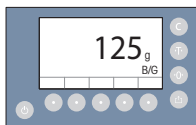
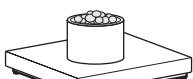
### 去皮



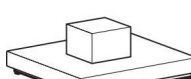
### 清皮



### 切换重量单位



### 打印或传输数据



## 附录：

### 有害物质含量表


产品类别：电子称重仪表、重量变送器、接线盒及仪表附件模块

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
外壳及相关配件	×	○	○	○	○	○
显示屏	×	○	○	○	○	○
电路板	×	○	○	○	○	○
连接线	○	○	○	○	○	○
通讯电缆	○	○	○	○	○	○
电源线	○	○	○	○	○	○
适配器/开关电源	×	○	○	○	○	○
辅件	○	○	○	○	○	○
电池 (如有)	×	○	○	○	○	○

本表格依据SJ/T 11364的规定编制。

○：表示该有害物质在该部件所有均值材料中的含量均在GB/T 26572规定的限量要求以下。

×：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。表中标有“×”的所有部件都符合欧盟RoHS法规。



产品类别：工业衡

部件名称	有害物质					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr6+)	多溴联苯(PBB)	多溴二苯醚(PBDE)
秤体	×	○	○	○	○	○
预埋件	○	○	○	○	○	○
仪表	×	○	○	○	○	○
传感器	○	○	○	○	○	○
电缆	○	○	○	○	○	○
辅件	×	○	○	○	○	○
PCB板	×	○	○	○	○	○
铅酸电池 (如有)	×	○	○	○	○	○
镍氢电池 (如有)	×	○	○	○	○	○
减速电机 (如有)	×	○	○	○	○	○
电控柜 (如有)	×	○	○	○	○	○
齿轮箱 (如有)	×	○	○	○	○	○

本表格依据SJ/T 11364的规定编制。

○：表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。

×：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。

表中标有“×”的所有部件都符合欧盟RoHS法规。





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