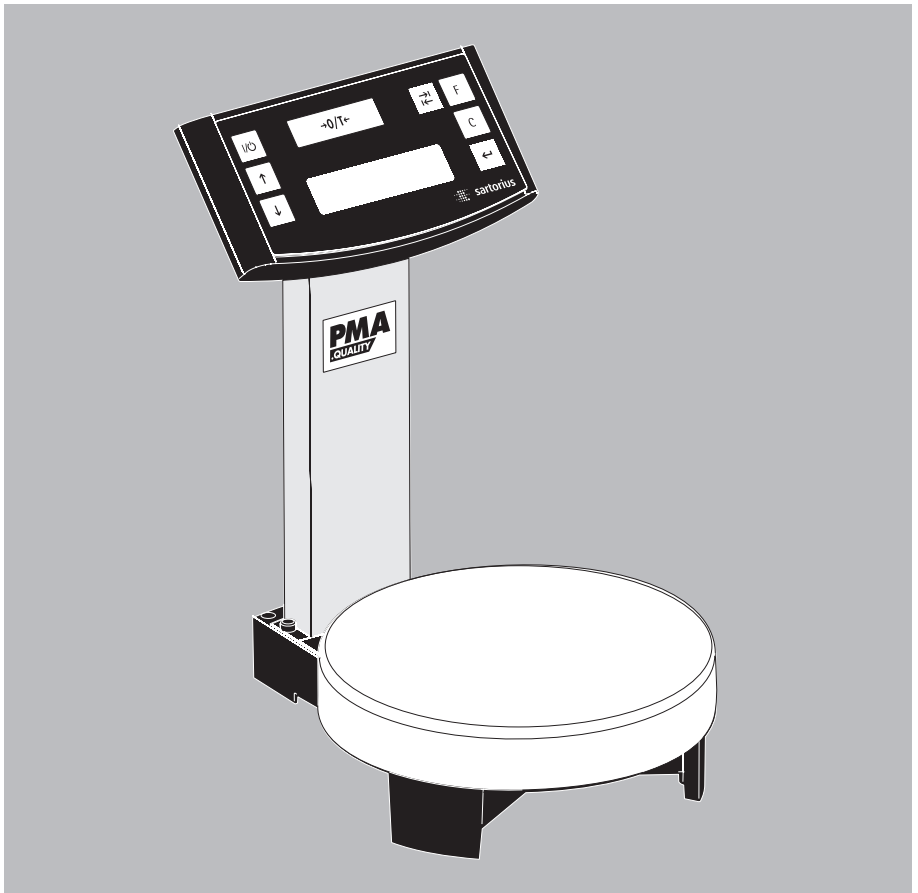


Installation Instructions

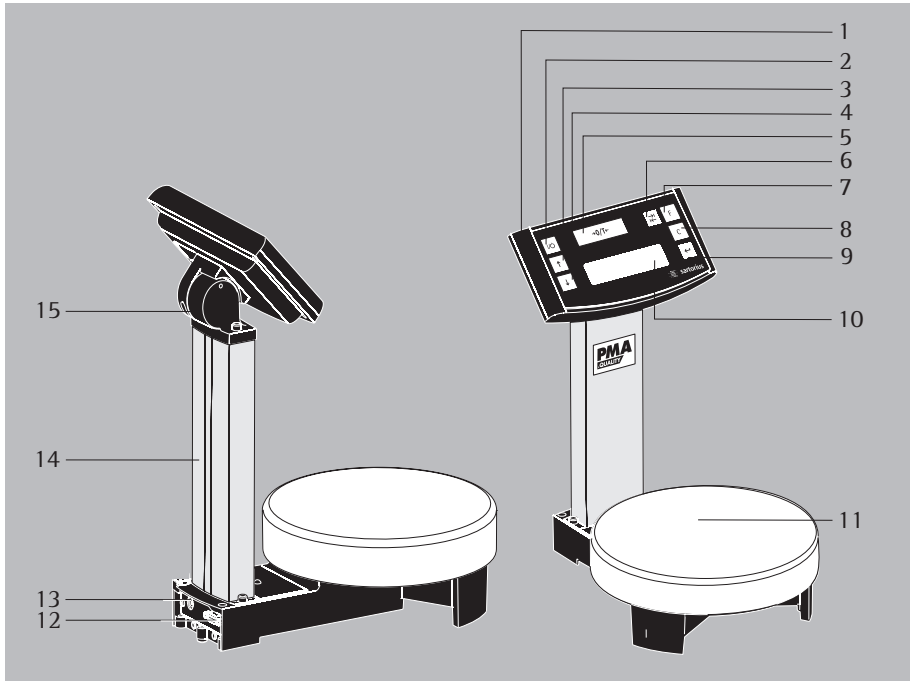
Sartorius PMA.Quality PMA7501, PMA7501-000...

Electronic Paint-mixing Scales



General View of the Equipment

PMA7501



1 Display and control unit

2 key (On/Standby)

3 key: Upwards

4 key: Downwards

5 key: Zero/Tare

6 key (TOGGLE)

With the PMA 7501, you can toggle to two decimal places – from 0.05 g to 999.95 g – or toggle between – “g” and “p” – parts per pound, depending on the menu settings

7 factor key (FORMULATION) for paint-mixing applications

8 key (Clear) and [REC] key for paint-mixing applications

9 key [ENTER] and [MEM] key for paint-mixing applications

10 Display

11 Weighing pan

12 Interfaces

(here: D-Sub connector, 9-contact)

13 DC jack for connection to AC power

14 Column

15 Joint

The following symbols are used in these instructions:

● Indicates required steps

○ Indicates steps required only under certain conditions

> Describes what happens after you have performed a particular step

– Indicates an item in a list

⚠ Indicates a hazard

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Intended Use

The PMA7501 has been specially designed for use in the paint-mixing sector. This scale can be operated either using the keypad on the display and control unit (in “stand alone” mode) or using the application software (e.g., paint manufacturers’ paint-mixing applications) installed on your PC.

If required, Sartorius can supply you with DOS or Windows®-based device drivers to generate application programs.

Note:

- Read the installation and operating instructions carefully before connecting the scale and putting it into operation.
- The application examples and menu settings described in these installation instructions are not valid for PMA7501-000W.

Warnings and Safety Precautions

This scale meets the guidelines and standards governing electronic equipment, electromagnetic compatibility and the stipulated safety standards. Improper use or handling can result in property damage and/or personal injury. To prevent damage to the equipment, read these operating instructions thoroughly before using your scale. Keep these instructions in a safe place.

- If the equipment is not used in accordance with the operating instructions, product liability may be affected.
- Do not expose the scale to extreme temperatures, aggressive chemical vapors, moisture, shocks or vibrations.
- The displayed values can be affected when subjected to extreme electromagnetic influence. When the negative influence has subsided, the scale will again be fully operational.
- △ The equipment must be used indoors only.
- △ The scale may not be operated in hazardous /EX Zone areas.
- △ To ensure safety, disconnect the equipment from power before connecting or disconnecting the cables or electronic peripheral devices.
- If you use cables purchased from another manufacturer, check the pin assignments in the cable against those specified by Sartorius before connecting the cable to Sartorius equipment, and disconnect any wires that are assigned differently. The operator shall be solely responsible for any damage or injuries that occur when using cables not supplied by Sartorius.
- When connecting the scale to the power supply, the laws valid in your country must be observed. If you should have any questions, please contact your supplier or Sartorius Customer Service for information on the legal regulations applicable in your country. The scale must be installed by a certified technician to avoid forfeiture of all claims under the manufacturer's warranty.
- △ If you see any indication that the scale cannot be operated safely (for example, due to damage), turn it off and lock it in a secure place or otherwise prevent use of the equipment for the time being. Adhere to the accident prevention regulations and inform the operators accordingly.
- △ Always make sure the equipment is disconnected from AC power before performing any installation, cleaning, maintenance or repair work on the scale. To avoid forfeiture of all claims under the manufacturer's warranty, all repair and maintenance work must be performed by authorized Sartorius service technicians.
- All other cables connecting the weighing equipment and peripheral devices, as well as the wiring inside the devices, are cased in PVC materials. Chemicals that corrode these materials must be kept away from these cables.
- △ Never use a hammer to close the lid of a paint can while it is still on the weighing pan. Otherwise, you will damage the weighing system.

Getting Started

- Remove the scale from its packaging.
- After unpacking the scale, check it immediately for any visible damage as a result of rough handling during shipment.



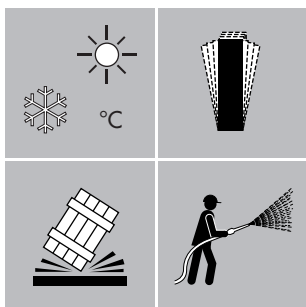
Equipment Supplied

- Scale
- Weighing pan
- Table adapter with country-specific mains cable
- 2x protective plugs (in the column)
- Model PMA7501-000U only: USB data cable

Setting Up the Scale

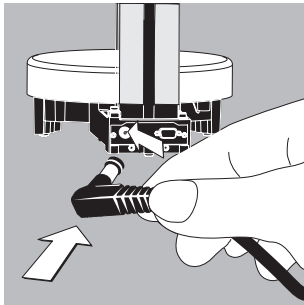
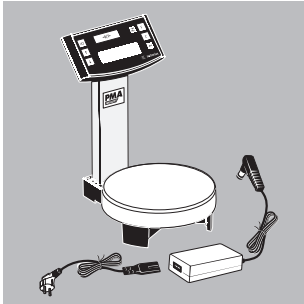
Choose a suitable place to set up the scale. Avoid exposure to drafts, heat, moisture and vibration. Make sure to read the instructions carefully before connecting the scale to AC power.

- △ Observe the safety instructions and warnings in this manual.



- Place the weighing pan on the scale.



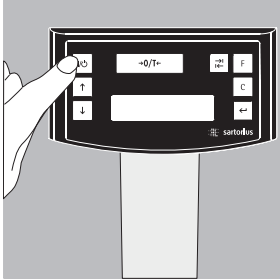



Connection to AC Power

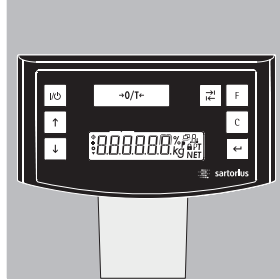
The equipment is powered through the AC adapter supplied

- Insert the right-angle plug into the DC jack (13) on the scale
 - Connect the country-specific mains cable to the adapter
 - Plug the mains cable into an electrical AC power outlet
- △ Observe the safety instructions and warnings in this manual.
Check that the voltage rating of the AC adapter matches that of your local line voltage (mains supply). If it does not match your local voltage rating or if the plug design differs from your local standard, contact your Sartorius office or dealer.
Use only original Sartorius AC adapters.
The use of AC adapters from other manufacturers, even if these units have a registered approval rating from a national testing laboratory, requires the approval of a certified technician.

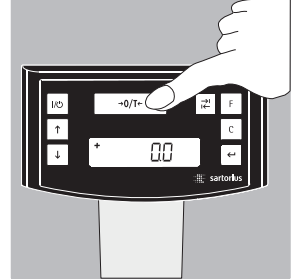
Operation




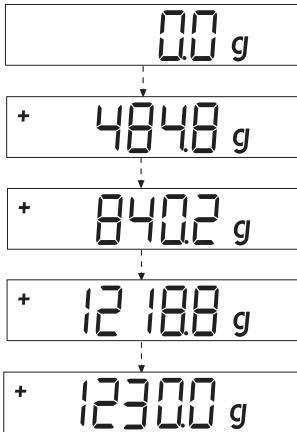
Turn on the scale using the  key (2).




After the scale has been turned on, it will automatically run a self-test. At the end of this test, 0.0 g is displayed.



If a different readout is displayed, zero or tare the scale using the tare key  (5).



Weighing with One Decimal Place

Place an empty paint can on the weighing pan. Press the tare key  (5). The display shows “0.0 g.” Pour in the first component, and read off the weight as soon as the stability symbol appears; in this case, “g.” Pour in additional components until the desired weight of your formula is reached. Remove the filled paint can from the weighing pan.



Never use a hammer to close the lid of a paint can while it is still on the weighing pan. Otherwise, you will damage the weighing system.

Weighing with Two Decimal Places

Note:

To weigh using two decimal places, you must first adapt the settings (refer to the chapter entitled “Menu Settings”)

Press the toggle key $\boxed{\text{MODE}}$ (6). The display shows “0.00 g.”

0.00 g

+ 118.85 g

0.00 g

+ 205.50 g

+ 213.50 g

+ 593.85 g

+ 1414.2 g

Place an empty paint can on the weighing pan (11).

Press the tare key $\boxed{\text{O/T}} \text{ (5)}$. The display shows “0.00 g.”

Pour in the first component: 205.50 g.
Read off the weight as soon as the stability symbol appears; in this case, “g.”

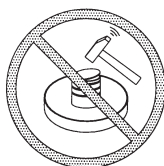
Pour in additional components until the desired weight of your formula is reached.
Remove the filled paint can from the weighing pan.

Important Note:

If you tare the scale, and then press the toggle key $\boxed{\text{MODE}}$ (6) to toggle to the second decimal place with a resolution of 0.05 g, you can continue weighing with two decimal places up to 999.95 g.

For weights exceeding 999.95 g, only one decimal place will be displayed.

Never use a hammer to close the lid of a paint can while it is still on the weighing pan.
Otherwise, you will damage the weighing system



Applications

Formulation Mode (Calculation by a Factor)

This mode enables you to weigh in amounts that are smaller or larger than that of your basic formula for a specific paint color (e.g., 250 ml of a 1-l formula).

You can select various factors (amounts) by pressing the \boxed{F} formulation key (7):
0.25 0.5 0.75 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0.

By pressing the $\boxed{\uparrow}$ key (3): upwards
or $\boxed{\downarrow}$ key (4): downwards,
you can alter the value – in 0.1 increments, as of factor 1.0
or – 0.01 increments, from factor 0.25 to 1.0.

Important Note:

The flashing arrow \blacktriangledown on the display means that the weight shown is not verified for use in legal metrology (not legal for trade).

Example:

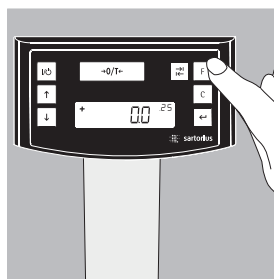
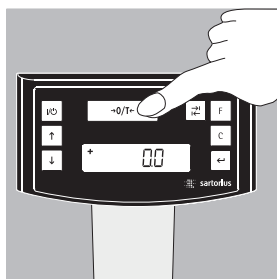
As you pour in the components of your formula, the weight is displayed in “g.”

Let’s suppose you want to weigh only 250 ml of a basic formula that is for a total amount of 1 L. With the recalculation mode, you do not need to manually recalculate the individual components.

The basic formula for 1 liter is:

250 g 1st component
+ 250 g 2nd component
+ 500 g 3rd component

Total: 1000 g



1. Place the empty paint can on the weighing pan and tare (zero the display).
2. Press the \boxed{F} formulation key (7) several times to select the conversion factor “.25” used in this example.



3. “.25” is displayed next to the weight



4. Slowly pour in the first component, “250 g” until the display shows “250 g.”



5. Pour in the second component, “250 g” until the display shows “500 g.”



6. Pour in the last component, “500 g” until “1000 g” is displayed.

We have come to the end of our example. According to the display, exactly 1,000 g was poured in, but the paint can actually contains only 250 g by weight according to the factor you selected, .25. Follow the same procedure for any other conversion factor or to convert a 1-gallon formula into quarts.

Weighing Using the Recalculation Mode

Let's suppose that you poured in too much of one color component for a given formula (e.g., one consisting of 4 components).

In addition, let's assume that you previously poured in all of the other amounts exactly according to each of the values you entered and stored by pressing the \leftarrow key [MEM] (9). Press the \downarrow key (4) to start the recalculation program. “C” will begin flashing on the display. To correct the weight displayed to the same value you entered for the given formula, either scroll upwards using the \uparrow key (3), or downwards using the \downarrow key (4). When you then press the \leftarrow key [MEM] (9), the scale will automatically calculate and display the amounts of paint in “g” to add for each of the other components that you already poured in. This mode thus ensures that the total result of your formula for these components will be correct. After pouring in these amounts, you can continue to add the remaining components of your formula.

Important Note:

You can correct an incorrect amount any number of times. However, the total (liter) quantity in the paint can will increase each time you correct a component. Therefore, press the \square key (8) to check how much the total quantity (in liters) will be. (“C” = correction factor)

The arrow \blacktriangledown in the display means that the weight shown is not verified for use in legal metrology (not legal for trade).

Example (cumulative):

+ 118.0 g

1. Place an empty paint can on the weighing pan (11).
+ 118.0 g

.STO 01

4. Press the \leftarrow key [MEM] (9).
STO 01

+ 203.0 g

7. Pour in the 3rd component.
+ 203.0 g
Oops!
You poured in too much!
The correct weight for the formula is 200.0 g.

.COR 01

10. Press the \leftarrow key [MEM] (9).
COR 01

.COR 02

13. Press the \leftarrow key [MEM] (9).
COR 02

.STO 02

16. Press the \leftarrow key [MEM].
The scale will automatically return to the formulation program "C" disappears.
+ 200.0 g

0.0 g

2. Press the $\rightarrow 0/\pm$ key (5).
0.0 g

+ 110.0 g

5. Pour in the 2nd component.
+ 110.0 g

+ 203.0 g

8. Press the \surd key (4) to start the recalculation mode.
A "C" = correct flashes on the display

- 1.7 g

11. 1. Add the first component.
"C1" is displayed -1.7 g

- 2.0 g

14. Add the second component. "C2" is displayed.
-2.0 g

.C 103

17. To check the total weight, press the \square key (8) [REC].
"C" = Correction factor, in this example 1.03.
(Total formula weight \times correction factor = total weight)

+ 500 g

3. Pour in the first component.
+ 50.0 g

.STO 02

6. Press the \leftarrow key [MEM] (9).
STO 02

+ 200.0 g

9. Press the \surd key (4) several times to correct the value to:
+ 200.0 g

.00 g^{C1}

12. Pour in paint until 0.0 g is displayed.
0.0 g

.00 g^{C2}

15. Pour in paint until the value 0.0 g is obtained
0.0 g

+ 1000.0 g

18. Add the fourth component
+1000.0 g

We have come to the end of our example.

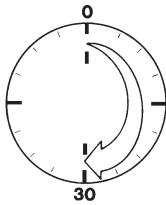
Calibration/Adjustment



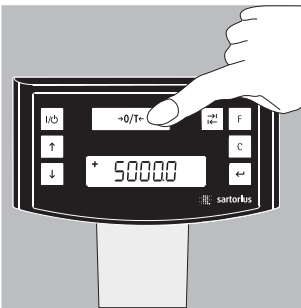
You can calibrate/adjust the scale by pressing the tare key $\boxed{\rightarrow 0/T \leftarrow}$ (5).

To do so, menu code 1 5 1 must be selected.

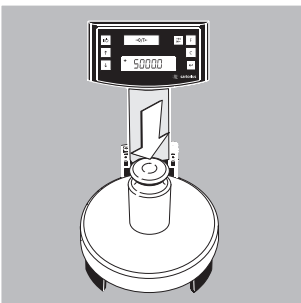
Calibration weight: 5,000 g; accuracy: + 0.075 g.



After connection to AC power and before each calibration/adjustment, allow the scale to warm up for approx. 30 min.



Hold down the tare key $\boxed{\rightarrow 0/T \leftarrow}$ (5) for 2 sec. When 5000 is displayed, release the key.



Center the calibration weight on the weighing pan (11).

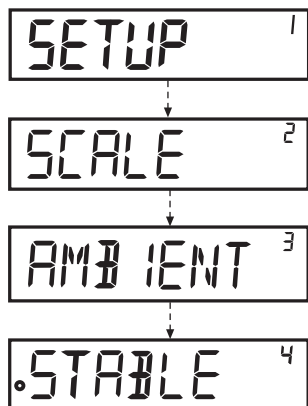
Calibration/adjustment is performed automatically. After calibration and adjustment, remove the weight.

Menu Settings

Navigating the SETUP Menu

Example:

Menu Item: Adaptation to ambient conditions




- Hold down the key [ENTER] for approx. 2 sec. “SETUP” will appear on the display (Level 1).
- Use the keys to select the desired menu item in the first level.
- Press the key [ENTER] to select the second level (Level 2).
- Use the keys to select the desired menu item in the second level.
- Press the key [ENTER] to select the third level (Level 3).
The menu items in the third level (Level 3) will be displayed
- Use the keys to select the desired menu item.
- Press the key [ENTER] to select the fourth level (Level 4).
- Call up the menu item desired in the fourth level.
Use the keys to select the desired menu item.
(We have come to the end of our example.)
- Press the key [ENTER]. “o” will appear;
the desired setting is defined.
- Press the key (Clear) several times to exit the menu.

Note:

To obtain a detailed list of the menu codes, please ask your nearest Sartorius office.

Important Menu Settings

- Hold down the  key [ENTER] for approx. 2 sec. "SETUP" will appear on the display (Level 1).

Level 1






SETUP

Language Settings

Level 1 Level 2

LANGUAGE

- o GERMAN
- ENGLISH
- FRENCH
- ITALIAN
- etc.

- Press the  key to select "LANGUAGE "
- Press the  key press [ENTER]
- Press the  keys to select a language
- Press the  key [ENTER]: "o" appears; the desired setting is defined.
- Press the  key (Clear) several times to exit the menu.

Default Setting: Standard (0.1) or PolyRange (0.05 g/0.1 g); Grams, PT or LB.

Default for these parameters are defined under "SETUP-SCALE-UNIT" and

"SETUP-SCALE-DECIMALS":

Level 1 Level 2 Level 3 Level 4

SETUP

SCALE








UNIT

GRAMS


- o PT./LB.

DECIMALS

- o STANDARD
- POLYRANGE

- Press the  key: [ENTER]
- Press the  key: [ENTER]
-  keys: select "DECIMALS"
- Press the  key: [ENTER]
-  keys: select "STANDARD"
- Press the  key [ENTER]; "o" appears: the new code has been set.
- Press the  key (Clear), several times to exit the menu.

– Activating the Toggle Key

After the toggle key  (6), has been activated, you can individually configure it with either 1 or 2 decimal places, as well as with grams or PT./LB. (see below). Once activated, pressing the toggle key toggles the display between units and decimal places.

Level 1 Level 2 Level 3 Level 4









SETUP

APPLICATION


TOGGLE












OFF

- o ON

- Press the  key [ENTER]
-  keys: select "APPLICATION"
-  key: press [ENTER]
-  keys: select "TOGGLE"
-  key: [ENTER],
-  keys: select "ON".
- Press the  key [ENTER]; "o" appears; the desired setting is defined.
- Press the  key (Clear) several times to exit the menu.









Assigning a Function to the Toggle Key

Pressing the toggle key  (6) toggles the scale between the default setting (see previous page) and the settings configured under “SETUP-SCALE-UNIT” and “SETUP-SCALE-DECIMALS”

Level 1	Level 2	Level 3	Level 4	
SETUP				
	APPLICATION			● Press the  key: [ENTER]
	UNIT			●  keys: select “APPLICATION”
				●  key [ENTER]: select the  key
		PT./L.B.		“UNIT,” press  key [ENTER].
		o GRAMS		●  keys: select “GRAMS”
				● Press the  key [ENTER]; “o” appears: the desired setting is defined.
	DECIMALS			●  keys, select “DECIMALS”
		STANDARD		● Press the  key, select setting
		o POLYRANGE		● Press the  key [ENTER]; “o” appears
				Press the  key (Clear) to exit the menu.

Activating the “LOCK” Function

By activating the “LOCK” function, you can protect the scale from unauthorized use. When the scale is connected to a PC, the two devices are in constant communication. If the “LOCK” function is activated under “EXTRAS,” and data transmission to the PC is interrupted, the lock symbol will be displayed. The scale will automatically be locked, preventing further weighing operations.

Level 1	Level 2	Level 3	Level 4	
SETUP				
	EXTRAS			● Press the  key [ENTER]
		LOCK		●  keys: select “EXTRAS”
				● Press the  key [ENTER]
				●  keys: select “LOCK”
				● Press the  key [ENTER]
		OFF		● Select “ON” using the  keys
		o ON		Confirm with the  key
				● Press the  key (Clear) several times to exit the menu.



Entering a Password



In addition to activating the “LOCK” function, the user may also enter a password.

Should the user wish to deactivate the “LOCK” function by pressing the “OFF” key, he must first enter the valid password. The password is comprised of a 6-character numeric code.

Use the  keys to call up numbers (0 to 9).

Six dashes (-----) will appear in the display. The first dash will blink in the display.

Select a number (0 to 9) using the  keys, press the  key [ENTER] to save the number.

The second dash will start to blink. Repeat the aforementioned process. Should you wish to assign a blank space to one of the six characters, simply press the  key [ENTER] when the dash begins to blink. Once all 6 characters have been entered, press the  key [ENTER] to confirm.

Note:

Keep a record of the numeric code in a safe place. The scale can only be accessed by entering the correct code.

Level 1 Level 2 Level 3 Level 4

INPUT

PASSWORD

PW.NEW

- keys: select "INPUT"
- Press the key [ENTER]
- Press the key [ENTER]
- keys: select "PW.NEW"
- Enter the numeric code: press the key [ENTER].
- Press the key (Clear) several times to exit the menu.

Changing the Password

Should you wish to change the password, you must first correctly enter the old password under "Password." "PW.OLD" will be displayed. Following the correct input, "PW.NEW" will automatically appear. You can now enter a new password, or confirm each blinking dash by pressing the key [ENTER]. Blank spaces are then displayed.

Note:

The old password can be deleted by entering 6 blank spaces. The scale is thus reset to its original state; i.e., the scale is not password-protected.

Level 1 Level 2 Level 3 Level 4

INPUT

PASSWORD

PW.OLD

PW.NEW

- keys: select "INPUT"
- Press the key [ENTER]
- Press the key [ENTER]
- Enter the old password "PW.OLD"
- "PW.NEW" will appear when the old password is correctly entered
- Enter the numeric code: press the key [ENTER]
- Press the key (Clear): reset the menu.

Setting "TEXTS" in the Display, "LONG" or "SHORT"

Either short or long display prompts for operator guidance can be shown.

Level 1	Level 2	Level 3	Level 4
SETUP			
	EXTRAS		
		TEXTS	
			LONG
			o SHORT

- Press the key [ENTER]
- Press the keys to select "EXTRAS"
- Press the key [ENTER]
- Press the keys to select "TEXTS"
- Press the key [ENTER]
- Press the keys to select "SHORT," confirm by pressing the key.
- Press the key (Clear) several times to exit the menu

Resetting the Scale: "RESET"

If necessary, you can reset the scale to factory settings.

Note:

If a password was activated, the correct password must first be entered.

Level 1	Level 2	Level 3	Level 4
SETUP			
	RESET		
		MENU	
			YES
			o NO

- Press the key [ENTER]
- Press the keys to select "RESET"
- Press the key [ENTER]
- Press the keys to select "MENU"
- Press the key [ENTER]
- Use the keys to select "YES"
- Press the key [ENTER]; "o" will appear: the new code is set
- Press the key (Clear) several times to exit the menu

Setting Codes

Under the setting "CODES," the menu items are displayed in code 1.1.1.1.


Level 1	Level 2	Level 3	Level 4
LANGUAGE			
	GERMAN etc.		
	o CODES		

- Press the key to select "LANGUAGE"
- Press the key [ENTER]
- Press the keys to select "CODES"
- Press the key [ENTER]; "o" will appear: the new code is set
- Press the key (Clear) several times to exit the menu.

Note:

To obtain a detailed list of the menu codes, please ask your nearest Sartorius office.

Troubleshooting

Problem	Cause	Solution
No segments appear on the weight display	- No AC power available	- Check the AC power supply
Weight display shows "LOW"	- The weighing pan is not in place	- Position the weighing pan
Weight display shows "HIGH"	- The load on the pan exceeds the scale's capacity	- Unload the scale
The weight readout changes constantly	- Unstable ambient conditions - Too much vibration or the scale is exposed to draft	- Set up the scale in another area - Access the menu to select the appropriate code to adapt the scale to the particular weighing environment (refer to "Menu Settings")
The weight readout is obviously wrong	- The paint component does not have a stable weight - The scale was not tared before weighing	- Tare prior to weighing
No weight value is shown and the lock symbol is active 	- Data communication between scale and PC has been interrupted and the "Lock" function is active	- Access the menu settings to deactivate the "Lock" function - Check the connection

Care and Maintenance

Cleaning

- △ Do not use caustics, concentrated acids or pure alcohol.
- △ Make sure that no liquid enters the scale housing
- Clean the scale using either a paint brush or a dry, soft and lint-free cloth.

Storage and Shipping Conditions

- To ensure safe shipment, your scale has been packaged using environmentally friendly materials. You should retain these materials in case you need to package your scale for storage or return shipment.
- Storage temperature: -20°C to $+75^{\circ}\text{C}$
- Permissible moisture level for storage of the packaged scale: 90% max.
- Read and follow the instructions given in the section entitled "Safety Inspection."

Safety Inspection

Safe operation of the PMA is no longer ensured when:

- There is visible damage to the AC adapter/power supply
- The AC adapter/power supply no longer functions properly
- The AC adapter/power supply has been stored for a relatively long period under unfavorable conditions
- The equipment has been exposed to rough handling during shipment
- Observe the warning and safety information

In this case, notify your nearest Sartorius Service Center or the International Technical Support Unit based in Goettingen, Germany. Maintenance and repair work may only be performed by service technicians who are authorized by Sartorius and who

- Have access to the required service and maintenance manuals, or
- Have attended the relevant service training courses

- △ The seals affixed to this equipment indicate that only authorized service technicians are allowed to open the equipment and perform maintenance work so that safe and trouble-free operation of the equipment is ensured and the warranty remains in effect.

Recycling



The packaging is made from environmentally-friendly materials that can be used as secondary raw materials. If you no longer need this packaging, bring it to your local recycling and waste

disposal facility according to the regulations applicable in your country.

In Germany, you can dispose of this material using the VfW dual system (contract number D-59101-2009-1129). The equipment, including accessories and batteries, must not be disposed of in general household waste, and must be recycled similar to electrical and electronic devices. For further information about disposal and recycling options, please contact your local service staff. The partners listed on the following website can be used for disposals within the EU:

- 1) Go to <http://www.sartorius.com>.
- 2) Select the summary under “Service.”
- 3) Then select “Information on Disposal.”
- 4) Addresses for local Sartorius disposal contacts can be found in the PDF files given on this webpage.



Sartorius will not take back equipment contaminated with hazardous materials (ABC contamination) either for repair or disposal.

Insert heading: “Service Address for Disposal”

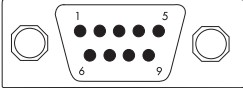
Please refer to our website (www.sartorius.com) or contact the Sartorius Service Department for more detailed information regarding repair service addresses or the disposal of your device.

Specifications

Model	PMA 7501, PMA7501-000W, PMA7501-000V2		PMA7501-000U
	Weighing range	g	999.95/7500
Readability	g	0.05/0.1	
Tare range (subtractive)	g	-999.95/-7500	
Max. linearity	g	≤ ±0.2	
Stability range	digit	0.25 to 4	
Moisture-proof rating	F	Non-condensing	
Allowable ambient operating temperature range	°C	0 to +40	
Weighing pan	∅ mm	233	
Scale housing (W × D × H)	mm	233 × 329 × 391	
Net weight, approx.	kg	3.3	
Calibration weight	kg	5, class F2 or better	
Power consumption	VA	Average: 8; maximum: 16	
Interface	RS-232C	USB (virtual serial interface)	
- Format	7-bit ASCII, 1 start bit, 1 or 2 stop bits	7-bit ASCII, 1 start bit, 1 or 2 stop bits	
- Parity	Even, odd or no parity	Even, odd or no parity	
- Transmission rates	1200 to 38,400 bit/s	1200 to 38,400 bit/s	
- Handshake mode	Software or hardware	Software or hardware	
		For more information, see the section entitled "USB Port"	

Interfaces

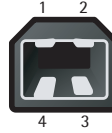
9-contact interface port



Pin Assignment

- Pin 2: (RXD) Receive Data
- Pin 3: (TXD) Transmit Data
- Pin 4: (DTR) Data Terminal Ready
- Pin 5: (GND) Ground
- Pin 6: BPI bridge
- Pin 8: (CTS) Clear to Send

USB Typ B



Pin	Name	Description
1	VCC	+5 V
2	D-	Data -
3	D+	Data +
4	GND	Ground

Accessories

In-use dust cover		YDC01PMA
RS-232 data cable (SBI)	(2 m)	YCC01-0027M2
RS-232 data cable (BPI)	(2 m)	YCC01-0028M2
RS-232 data cable (BPI)	(20 m)	YCC01-0028M20
USB/RS-232 data cable (SBI)	(1.80 m)	YCO12
USB/RS-232 data cable (BPI)	(1.80 m)	YCO13
USB diata cable		YCC01-0040M3
<hr/>		
AC adapter		
- for all countries except India		6971991
- for India only		6971983
+ country-specific cable		

USB Port (PC)

Purpose

Any PMA7501-000U can be connected to a PC equipped with a USB port. A virtual serial interface (virtual COM port) is set up as a device type at the USB port. This virtual serial interface is identified and operated by the application program. The protocols xBPI and SBI can be transmitted via the USB port.

System Requirements

- Computer (PC) with Windows 98SE®, Windows ME®, Windows 2000®, Windows XP®, Windows Vista® or Windows 7®
- Available USB port on the PC
- USB cable

Connecting the Balance via USB



The current USB port for the computer is established when the software driver is being installed. The driver must be re-installed every time you wish to change the port.

Therefore, choose one USB port that can permanently or regularly be used to connect the balance.

- Switch off the balance.
- Unplug the balance from the mains.
- Connect the USB cable to the balance and to the USB port on the computer.
- Plug the balance into the mains again and switch it on.
- Windows detects the device connected to the USB port.
If the device is being connected for the first time, the Windows Installation Wizard will run.

Installing Software Drivers

- Run the Installation Wizard for the driver.
- Follow the instructions that appear.
- To complete the installation, click on Finish.
- The virtual interface is now ready for operation.

Windows® usually adds the virtual port in the position following your highest-numbered COM port.

Example:

For a PC with up to 4 COM ports, the new virtual port would then be COM5 (see Device Manager).

Installation Guides for Windows XP[®], Windows Vista[®] and Windows 7[®]

Changing the Port Number

If you use the USB interface with a program that limits the number of COM port designations (e. g., only COM1, 2, 3, 4), you may have to assign one of these port numbers to the new virtual port.

- Open the setting for the USB serial port in the Windows[®] Control Panel:
 - START > My Computer > Control Panel
 - System > Hardware > Device Manager
- Open the Connections submenu.
- Double-click on USB Serial Port.
- Select Port Settings > Advanced.

Changing Latency Time

- Open the settings for the USB serial port, following the above instructions.
- For a faster rate of communication, change the setting for the latency timer to 1msec.

Plug & Play Mode in Autoprint (SBI)

- Open the settings for the USB serial port, following the above instructions.
- Stop the Plug & Play mode from running.

Uninstalling the Driver

The software driver for the USB connection can be uninstalled with the Windows[®] Uninstaller.

CE EU-Konformitätserklärung EU Declaration of Conformity

Hersteller
Manufacturer Sartorius Lab Instruments GmbH & Co. KG
37070 Goettingen, Germany

erklärt in alleiniger Verantwortung, dass das Betriebsmittel
declares under sole responsibility that the equipment

Geräteart
Device type Farbmischwaage
Paint-mixing scale

Modell
Model PMA7501, PMA7501-000G, PMA7501-000GL, PMA7501-000U, PMA7501-000V2,
PMA7501-000W, PMA7501H

in der von uns in Verkehr gebrachten Ausführung allen einschlägigen Bestimmungen der folgenden Europäischen Richtlinien – einschließlich deren zum Zeitpunkt der Erklärung geltenden Änderungen – entspricht und die anwendbaren Anforderungen folgender harmonisierter Europäischer Normen erfüllt:
in the form as delivered fulfils all the relevant provisions of the following European Directives – including any amendments valid at the time this declaration was signed – and meets the applicable requirements of the harmonized European Standards listed below:

2014/30/EU Elektromagnetische Verträglichkeit
Electromagnetic compatibility
EN 61326-1:2013

2014/35/EU Elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen
Electrical equipment designed for use within certain voltage limits
EN 61010-1:2010

2011/65/EU Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten (RoHS)
Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)
EN 50581:2012

Jahreszahl der CE-Kennzeichenergabe | Year of the CE mark assignment: 16

Sartorius Lab Instruments GmbH & Co. KG
Goettingen, 2016-04-20



Dr. Reinhard Baumfalk
Vice President R&D



Dr. Dieter Klausgrete
Head of International Certification Management

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Sartorius Lab Instruments GmbH & Co. KG
Weender Landstrasse 94-108
37075 Goettingen, Germany

Phone: +49.551.308.0
Fax: +49.551.308.3289
www.sartorius.com

The information and figures contained in these instructions correspond to the version date specified below.

Sartorius reserves the right to make changes to the technology, features, specifications and design of the equipment without notice.

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