



IMMB-03-02-11-21-EN

Start up Guide

Analytical and Precision Balances

Analytical balances:

- AS R2 PLUS

Precision balances:

- PS R1
- PS R1.M
- PS R2
- PS R2.M
- PS R2.H
- PS R2.M.H

To view a complete User Manual go to the website or scan QR code:



1. CONTENT

AS R2 PLUS (d=0,01mg)



Balance
x1



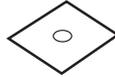
Weighing pan
x1



Draft shield
x1



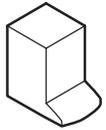
Centring ring
x1



Bottom insert
x1

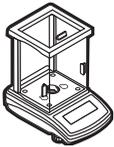


Power adapter*
x1



Fabric dust
cover
x1

AS R2 PLUS (d=0,1mg)



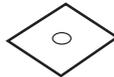
Balance
x1



Weighing pan
x1



Draft shield
x1



Bottom insert
x1



Power adapter*
x1

Models: PS R1 (d=1mg) | PS R2 (d=1mg)



Balance
x1



Weighing pan
x1



Draft shield
x1



Grounding foot
x1



Foot
x3



Power adapter*
x1

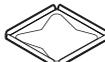
Models: PS R1.M | PS R2.M



Balance
x1



Weighing pan
x1



Draft shield
x1



Power adapter*
x1

*The plug type may vary by country.

Models: PS R2.H



Balance
x1



Weighing pan
x1



Draft shield
x1



Power adapter*
x1

Models: PS R2.M.H



Balance
x1



Weighing pan
x1



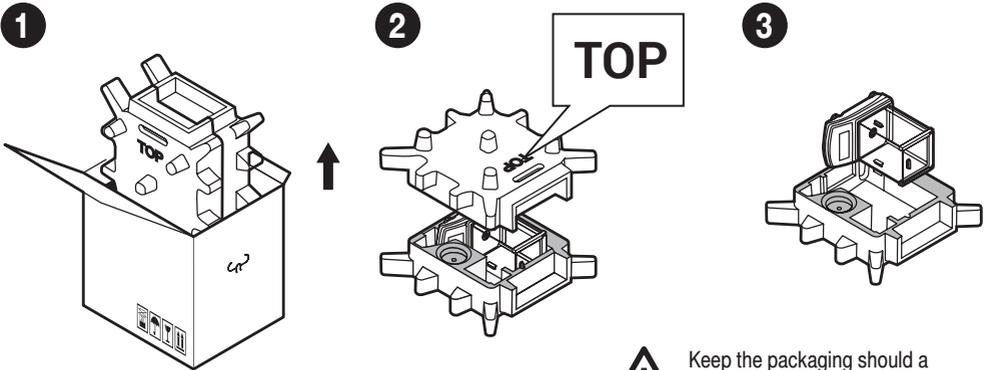
Draft shield
x1



Power adapter*
x1

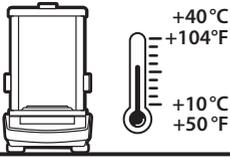
**The plug type may vary by country.*

2. UNPACKING



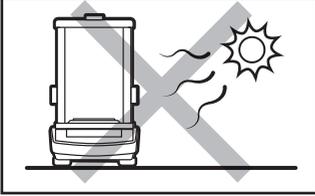
Keep the packaging should a warranty claim or service be required.

3. RECOMMENDATIONS AND WARNINGS

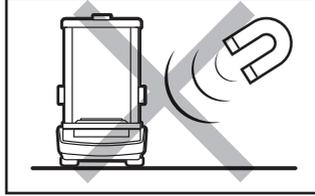


Operate the device in a room where the temperature ranges between 10–40 °C (50–104 °F) and where the relative humidity is below 80%.

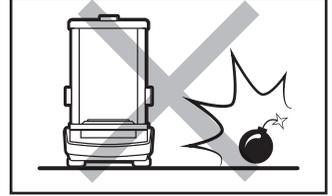
Place the balance on a solid surface to ensure stability. To obtain stable and repeatable weighing results, an anti-vibration table is recommended.



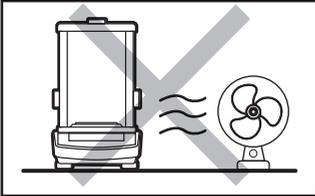
Place the balance away from heat sources. Avoid exposing the balance to the sunlight.



Avoid exposing the balance to a magnetic field. Do not weigh magnetic substances.



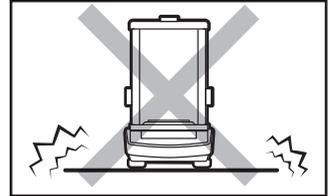
Do not place the balance in a hazardous area. Do not weigh explosive materials.



Avoid air drafts and air movements at the workstation.



Make sure that the balance is placed on an even surface.

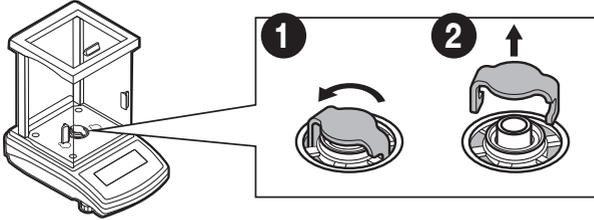


Do not place the balance on an unstable ground exposed to shocks and vibrations.

4. ACTIVITIES TO BE DONE PRIOR TO OPERATION

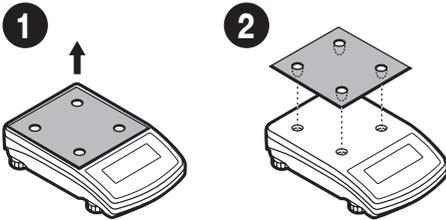
4.1. Transport lock removal

Models: AS R2 Series



 Keep the transport lock should a warranty claim or service be required.

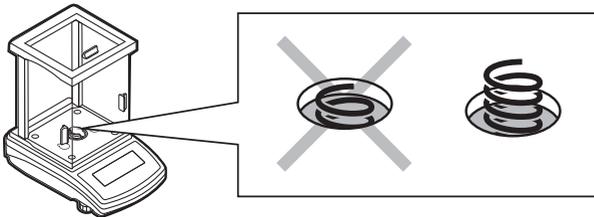
Models: PS R2 series | PS R1 series



 Keep the transport lock should a warranty claim or service be required.

4.2. Grounding spring check

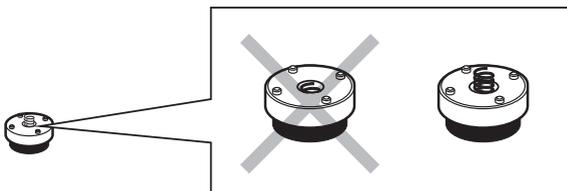
Models: AS R2 Series



 Check whether the grounding spring takes its intended location.

Make sure that the grounding spring juts slightly out of the hole.

Models: PS R2 series | PS R1 series

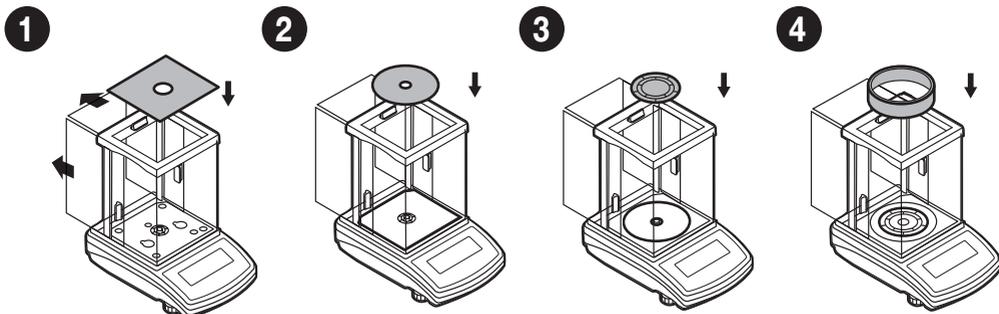


 Check whether the grounding spring takes its intended location.

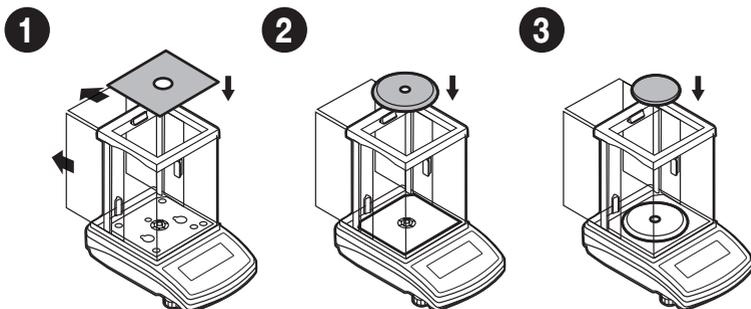
Make sure that the grounding spring juts slightly out of the hole.

5. COMPONENTS ASSEMBLY

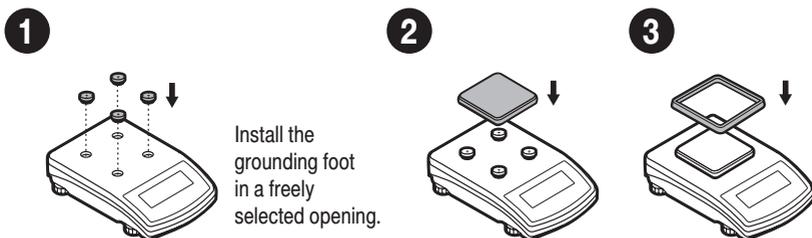
Models: AS R2 (d=0,01 mg)



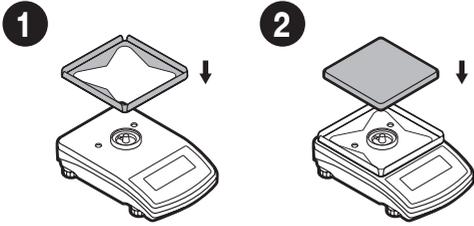
Models: AS R2 (d=0,1 mg)



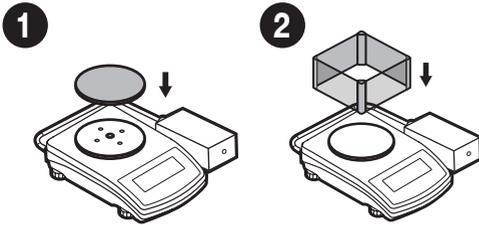
Models: PS R1 (d=0,01 mg) | PS R2 (d=0,01 mg)



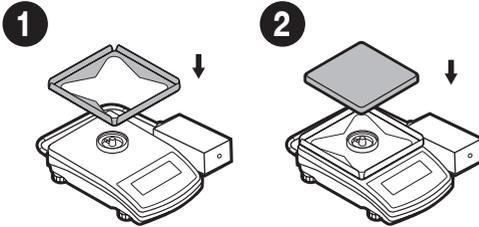
Models: PS R1.M | PS R2.M



Models: PS R2.H

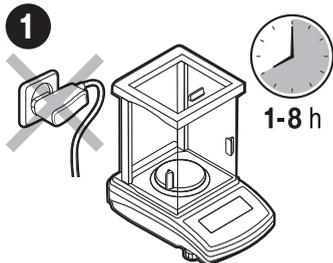


Models: PS R2.M.H

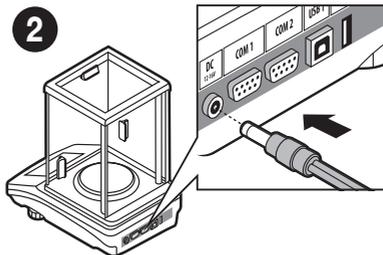


6. PREPARING FOR WORK

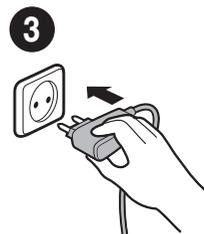
6.1. Temperature stabilization



Prior to switching the device on, let it reach room temperature (estimated stabilisation time: 1-8 hours).

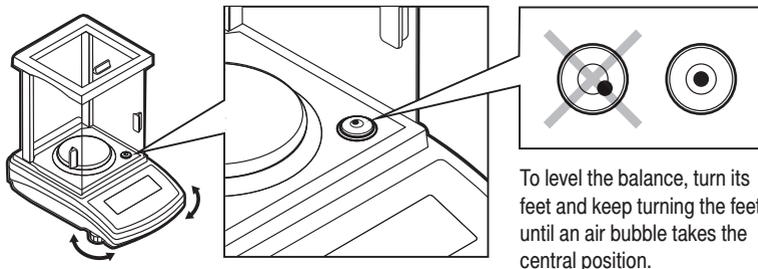


Connect the power adapter to DC connector.



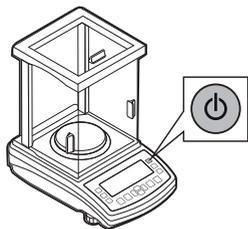
Connect the power adapter to the mains.

6.2. Leveling



To level the balance, turn its feet and keep turning the feet until an air bubble takes the central position.

6.3. Switch the balance on



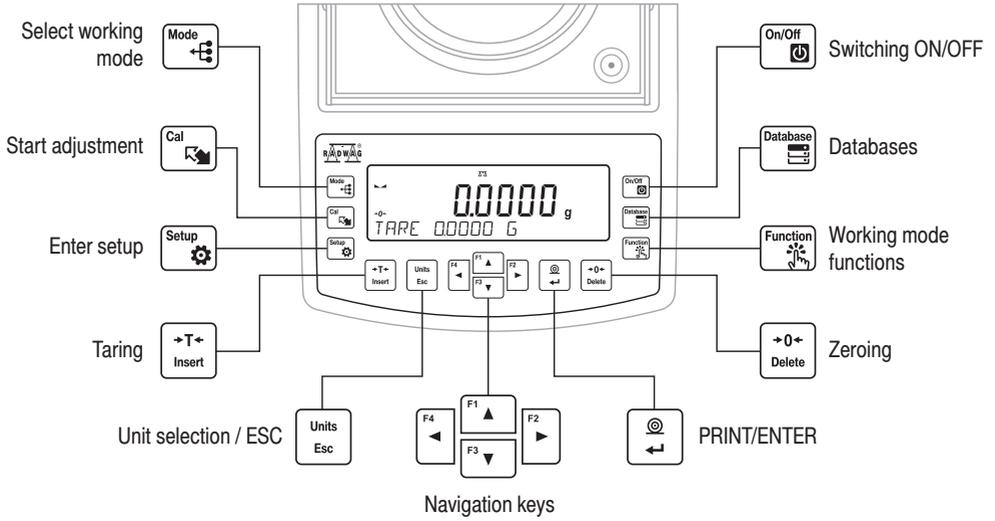
To switch the device on, press ON / OFF key.



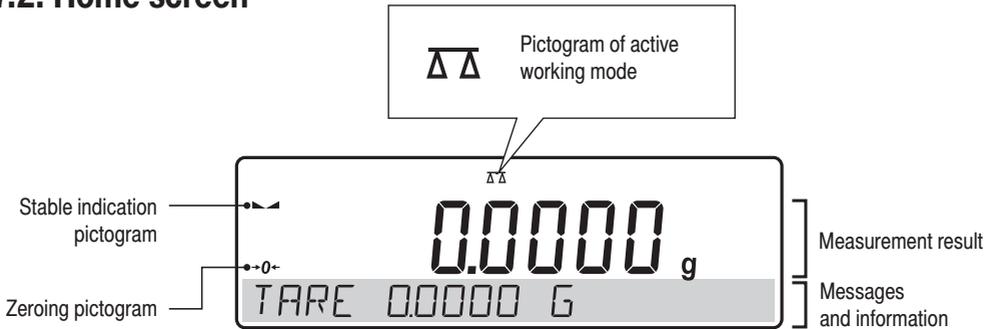
Your balance is ready to use!

7. PANEL AND SCREEN

7.1. Panel keys

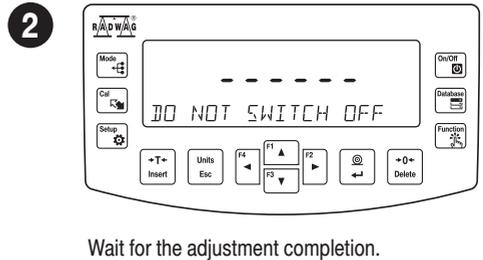
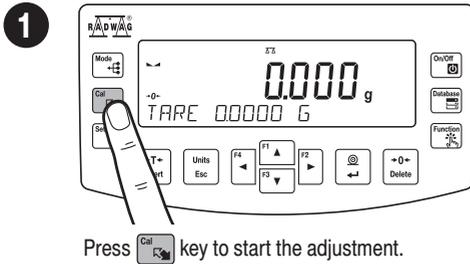


7.2. Home screen



8. BASIC OPERATIONS

8.1.1. Adjustment (for models with an internal adjustment only)



8.1.2. Adjustment (for models with an external adjustment only)

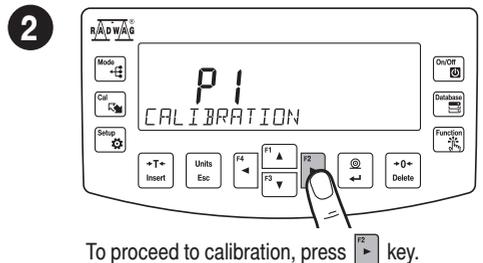
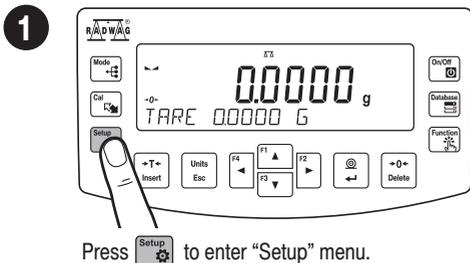
It is recommended to carry out adjustment operation prior to running the WEIGHING mode. External adjustment is carried out using an external mass standard of the right accuracy and weight value, which value depends on device type and capacity.



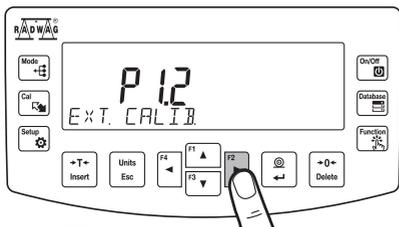
The adjustment mass standard does not come with the balance. Prior to adjustment prepare the right mass standard.

You are recommended to use mass standard of class F1 or F2. View the table and select the mass standard you need.

Balance model	Mass standard [g]
PS 200/2000.R1	1 000
PS 600.R1	500
PS 750.R1	500
PS 1000.R1.M	1 000
PS 3500.R1.M	2 000
PS 4500.R1.M	2 000
PS 6100.R1.M	5 000

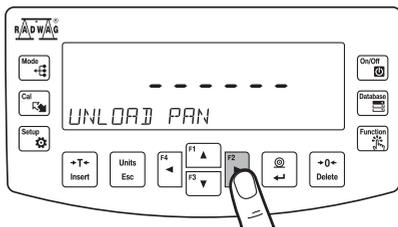


3



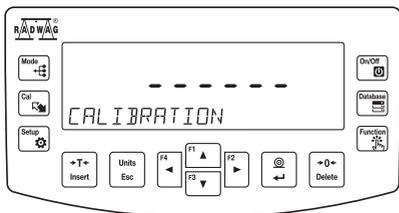
Using \uparrow keys select "External calibration" and press \rightarrow key.

4



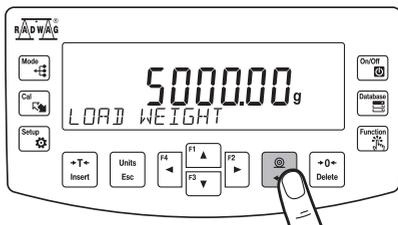
With unloaded weighing pan, press \rightarrow key.

5



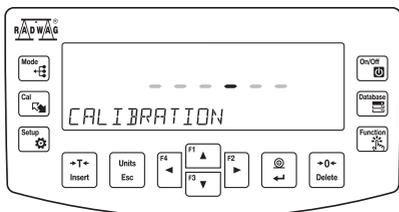
Wait for completion of the start mass determination process.

6



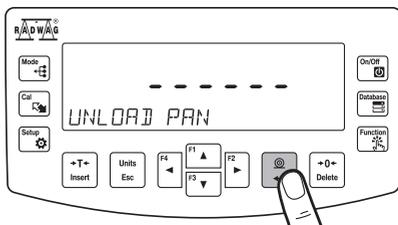
Load the weighing pan with mass standard and press \odot key.

7



Wait for the adjustment completion.

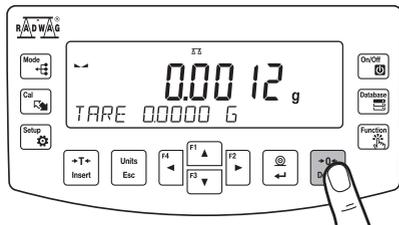
8



Upon process completion unload the weighing pan and press \odot key.

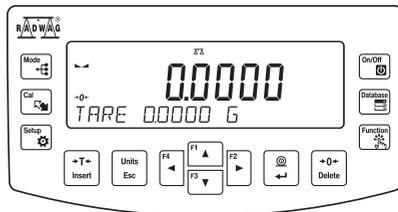
8.2. Zeroing

1



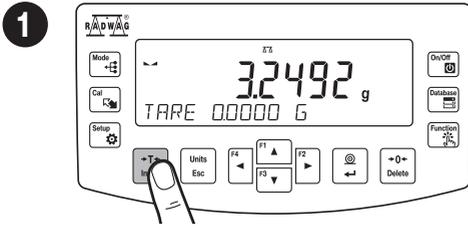
Make sure that the weighing pan is empty and press \odot key.

2

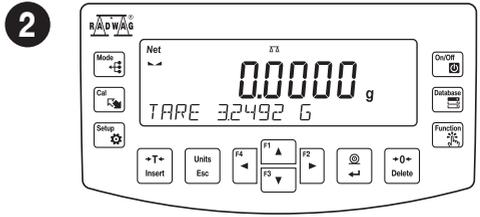


The balance has been zeroed.

8.3. Taring

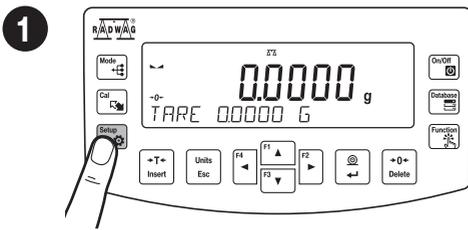


With loaded weighing pan: upon stabilisation of the weighing result, press **T-Insert** key.

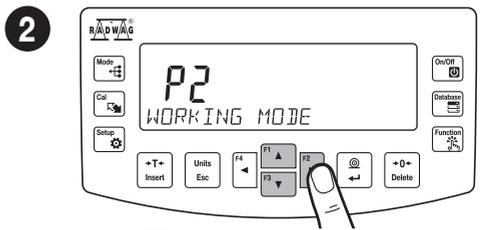


The balance has been tared.

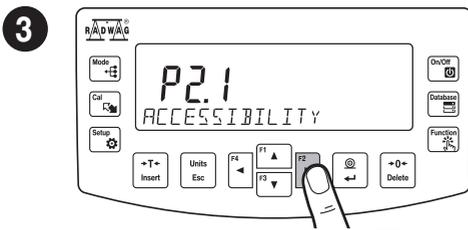
8.4. Working modes accessibility



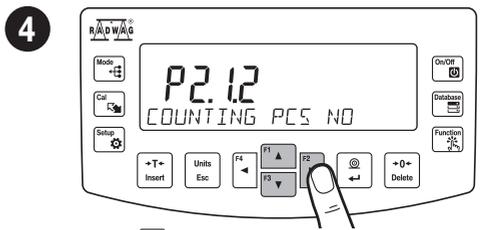
Press **Setup** to enter "Setup" menu.



Using **▲▼** keys select "Working mode" and press **F2** key.

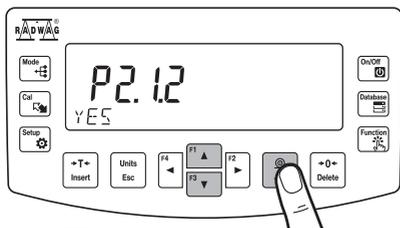


In the "Accessibility" position press **F2** key.



Using **▲▼** keys select working modes for which accessibility is to be set and press **F2** key.

5

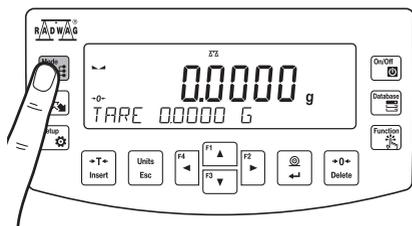


Using  keys set accessibility parameter to 'Yes' value for a selected working mode and press  key to confirm.

 To configure other working modes, follow the above procedure.

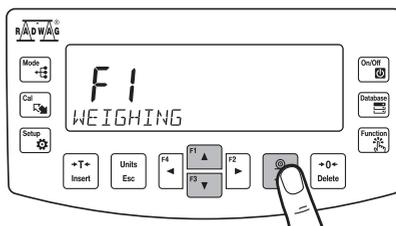
8.5. Selecting working mode

1



Using  key enter working modes menu.

2



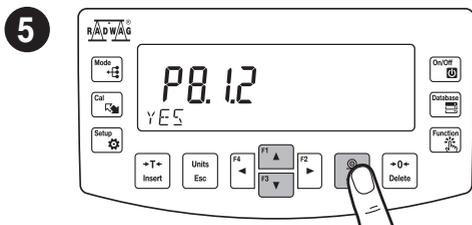
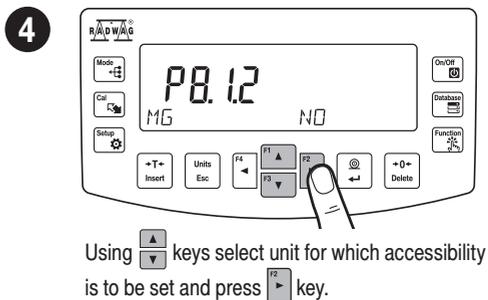
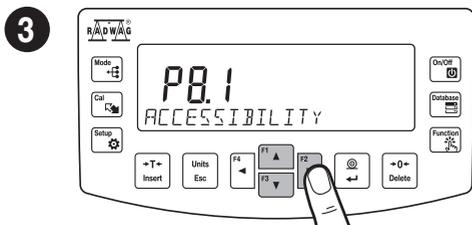
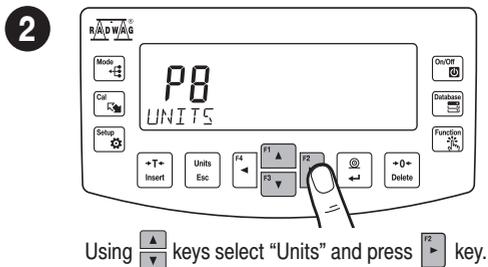
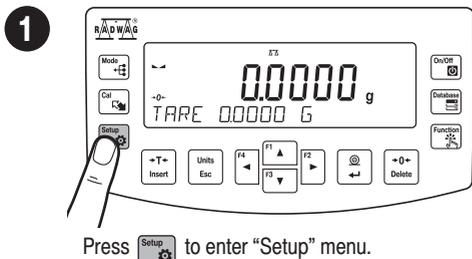
Using  keys select working mode and press  key to confirm.

The menu features the following working modes:

- Weighing
- Parts Counting
- Checkweighing
- Dosing
- Percent Weighing
- Density Determination of Solids
- Density Determination of Liquids
- Statistics
- Totalising
- Peak Hold
- Pipettes Calibration

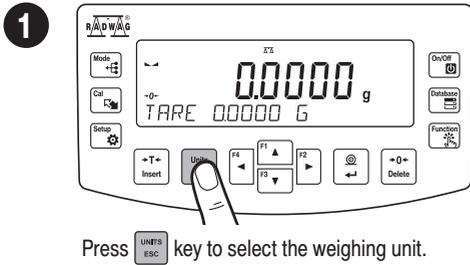
 Detailed overview of the settings of the working modes is to be found in balance's main user manual.

8.6. Weighing unit accessibility



 To configure other mass units, follow the above procedure.

8.7. Weighing unit selection



The balance enables selecting the following weighing units:

- Gram [g]*
- Milligram [mg]*
- Kilogram [kg]*
- Carat [ct]*
- Pound [lb]
- Ounce [oz]
- Troy ounce [ozt]
- Pennyweight [dwt]
- Hong Kong Tael [tjh]
- Singapore tael [tts]
- Taiwanese tael [ttt]
- Chinese tael [tic]
- Momme [mom]
- Grain [gr]
- Tical [ti]
- Newton [N]

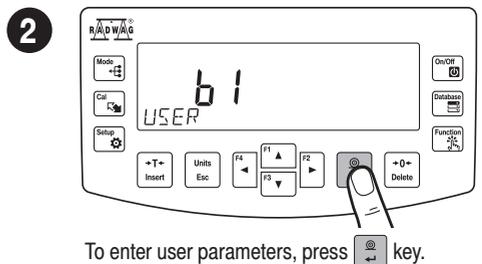
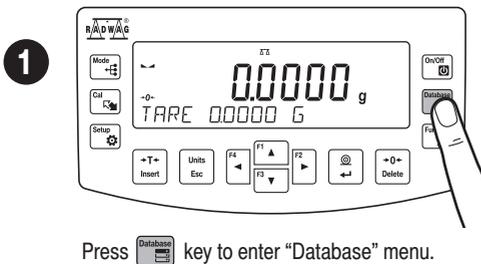
* Units available for verified balances exclusively

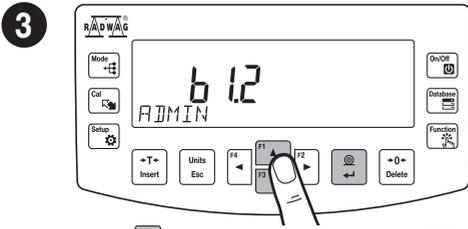
9. SETTINGS



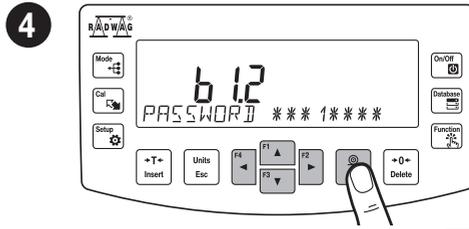
Some balance settings are accessible for Administrator exclusively. Prior balance parameters setup, log in as Administrator.

9.1. Administrator's logging in

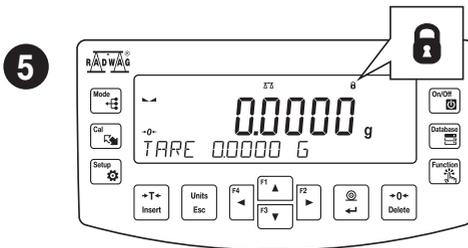




Using   keys select "Admin" and press  key to confirm.



Using    keys select "1111" and press  key to confirm.



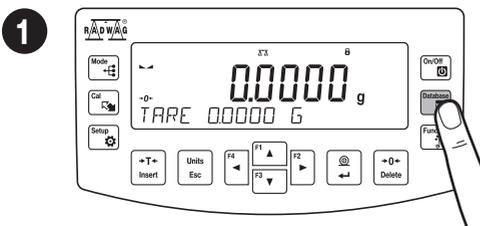
You have logged as the administrator.

 Upon logging in pictogram is displayed: 

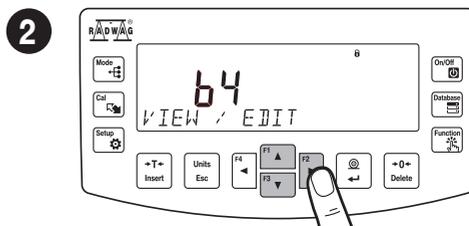
9.2. User settings



Prior to balance users setup, log in as Administrator (point 9.1.).



Press  key to enter databases.



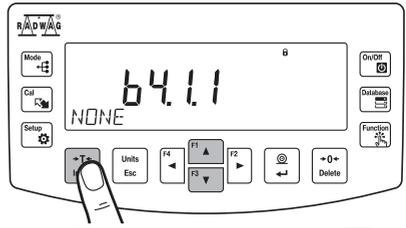
Using   keys select "View/Edit" option and press  key to confirm.

3



To select "Users" parameters, press key.

4



Using keys select "New" and press key to confirm.

In the following steps, set:

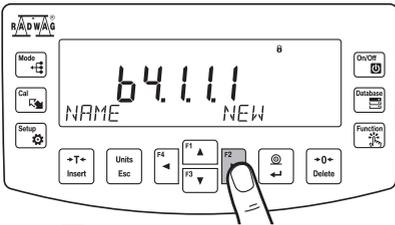
- User name
- Code
- Password
- Permissions level
- Language

5



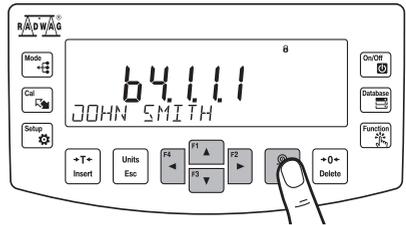
Press key to add a new user.

6



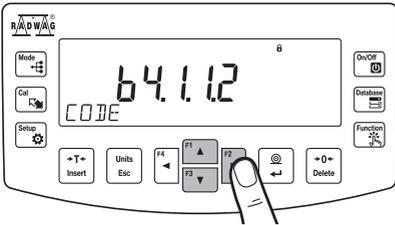
Press key to add a new user.

7



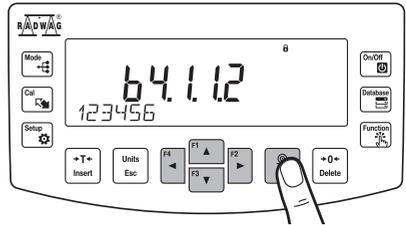
Using keys enter user name and press key to confirm.

8



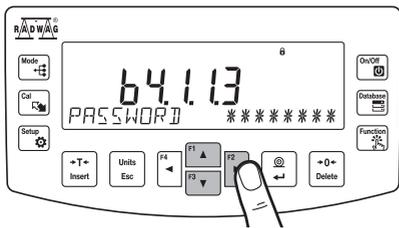
Using keys select "Code" and press key to confirm.

9



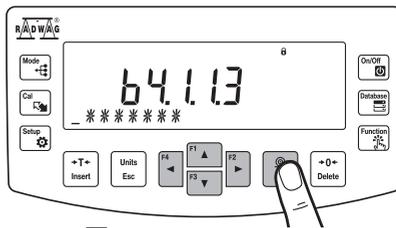
Using keys enter user code and press key to confirm.

10



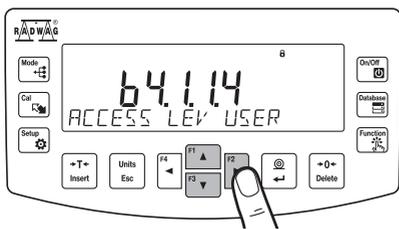
Using  keys select "Password" and press  key to confirm.

11



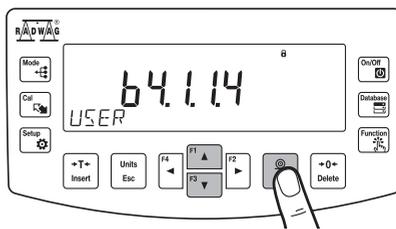
Using  keys enter user password and press  key to confirm.

12



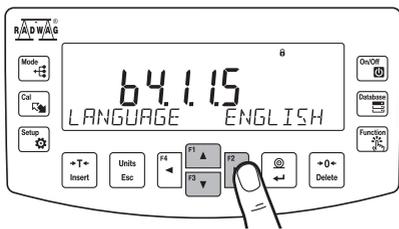
Using  keys select "Access Level" and press  key to confirm.

13



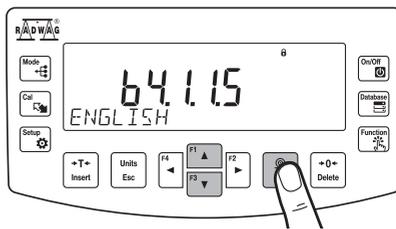
Using  keys select permissions level and press  key to confirm.

14



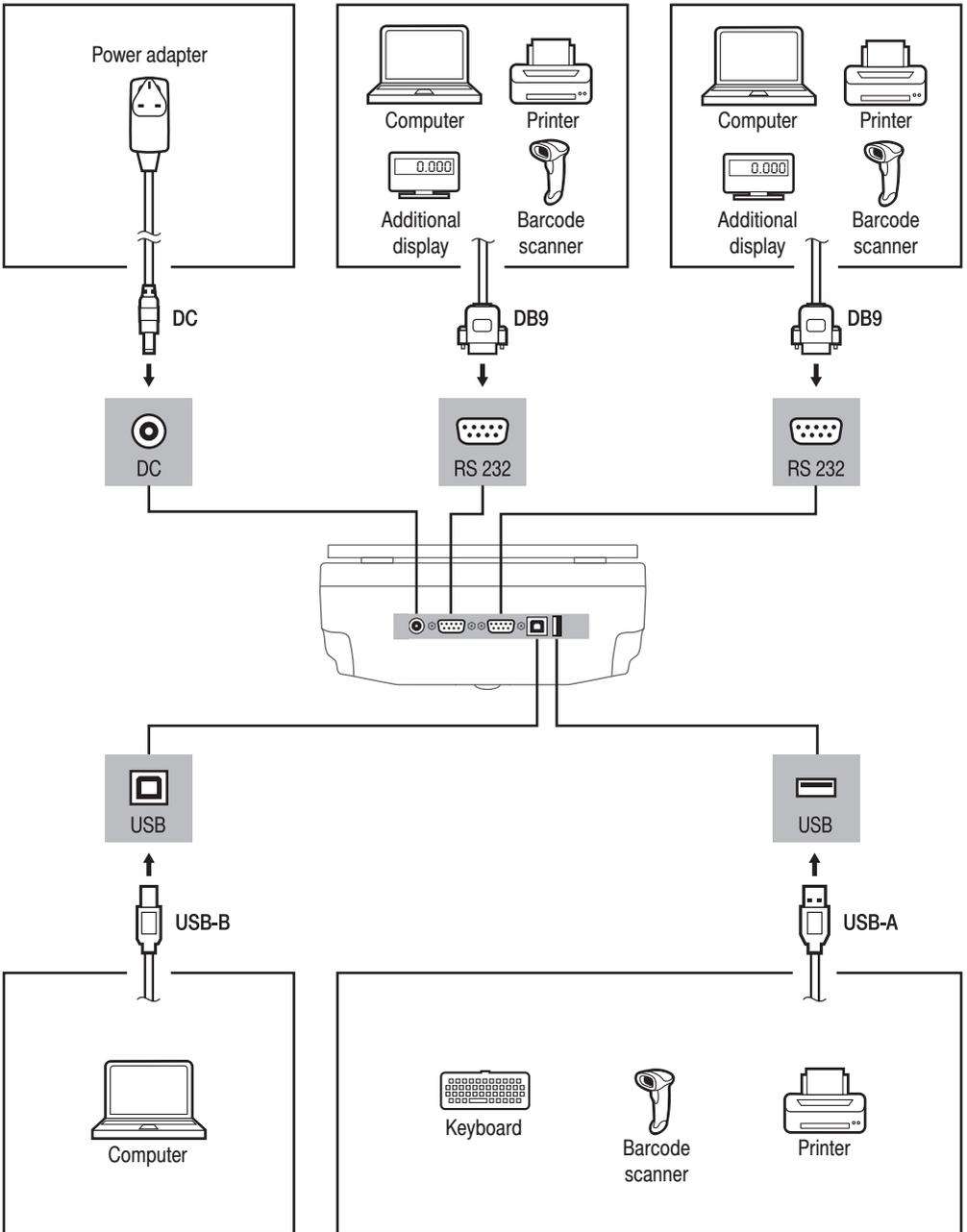
Using  keys select "Language" and press  key to confirm.

15



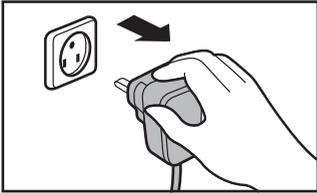
Using  keys select menu language and press  key to confirm.

10. PERIPHERAL DEVICES CONNECTORS



11. DEVICE CLEANING

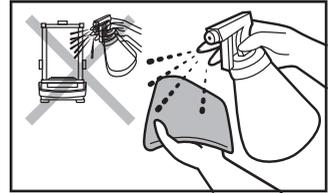
11.1. Guidelines and precautions



Prior to cleaning it is necessary to disconnect the device from the mains! Remove the plug from the outlet, disconnect all cables.



Use soft cloth made of either natural or synthetic fiber exclusively. Avoid using cloth made of stiff/hard fabric, this could cause scratches on the surface!



Apply the cleanser onto the cloth. Mind not to apply the cleanser directly onto the device!



Do not use aggressive cleaning agents (e.g. solvents, chlorine preparations, corrosive chemicals, bleach).



Neither use substances of sharp structure nor intended for scrubbing.



Make sure that neither dust nor liquid gets inside the weighing system (device inside).

11.2. Cleaning instructions



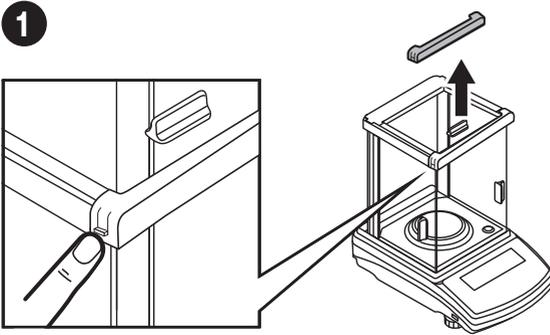
Shall it be necessary to disassemble the weighing chamber, follow the description provided in section 11.3.

- **GLASS PANES AND COMPONENTS** can be cleaned using window cleaner.
- **WEIGHING PANS AND STAINLESS STEEL OR ALUMINIUM COMPONENTS** can be cleaned using a cloth slightly soaked in a solution of water and gentle cleanser (e.g. soap or dishwashing liquid).
- **OPERATION PANEL AND HOUSING** can be cleaned using a cloth slightly soaked in a solution of water and gentle cleanser (e.g. soap or dishwashing liquid).
- Dry sample leftovers can be removed using either brush or handheld vacuum cleaner.
- Clean components can be dried using soft cloth or dust-free paper towel, with this the remaining moist will be absorbed.
- **Install all the components providing they are completely dry.**

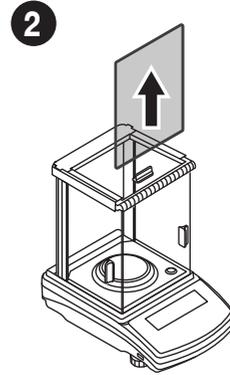
11.3. Weighing chamber elements disassembly



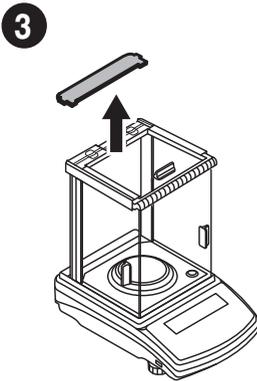
Prior disassembling weighing chamber elements make sure the balance is turned off and unplugged from the mains. When disassembling the elements, use tweezers that come standard with the instrument.



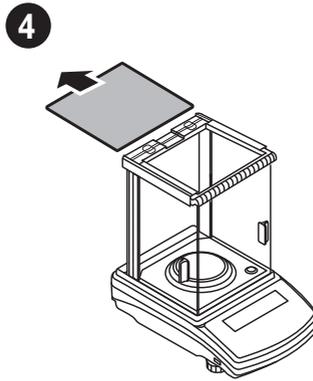
Press the moldings on the housing and lift the movable element up.



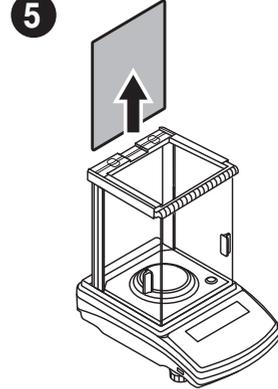
Now you can take out the front glass.



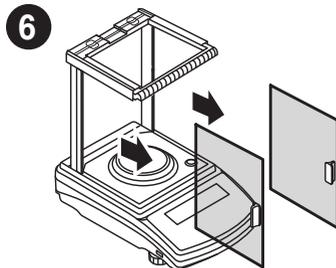
Press the moldings on the housing and lift the movable element up.



Now you can take out the upper glass.



Take out the back glass. The housing has recesses to facilitate removing the glass.



Slide out the door.



After cleaning the weighing chamber elements, they must be assembled in the reverse order.



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