

# **VARIO BALANCE**

Dosage Device



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# 0. Introduction

Dear customer,

Thank you for purchasing a Zubler metering balance. We hope this system will give you a pleasant workplace experience. Our technology undergoes continuous improvement and development based on our cooperation with experienced dental technologists.

Performance and economy are essential parameters for all our products.

In order to ensure seamless operation, we recommend reading these Instructions for Use carefully. The VARIO BALANCE is designed for dosing investment and dental stone m/gypsum or other dental materials. The rated maximum load (see Technical specifications) must not be exceeded.

## 0.1 Declaration of conformity

We, Zubler Gerätebau GmbH  
Buchbrunnenweg 26  
D-89081 Ulm-Jungingen,

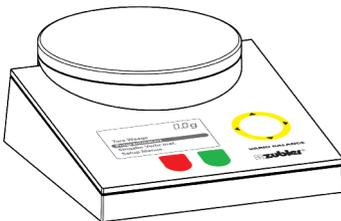
hereby declare, hereby declares that the

### **VARIO BALANCE**

metering balance scales meets the protection requirements of the following directives

2006/42/EG Machines Directive  
2004/108/EG EMV Directive

This declaration is void if the product is subjected to any modifications not authorized by us.



Kurt Zubler  
Managing Director

## 0.2 Description

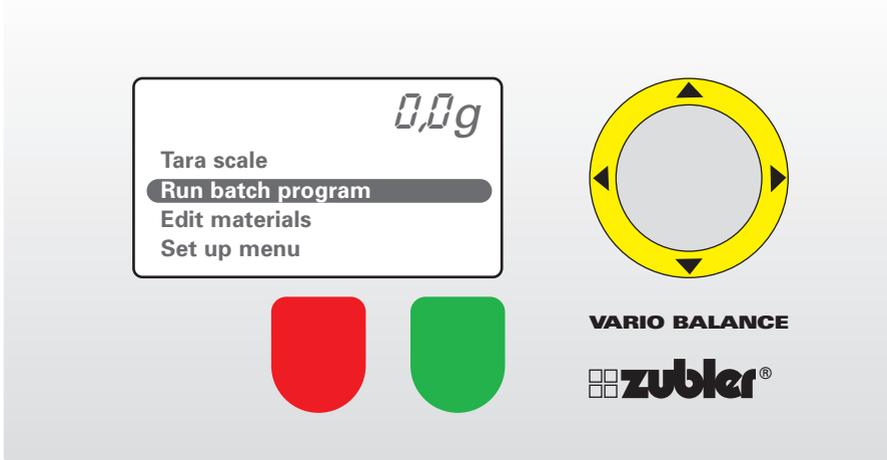


Figure 1: Control panel, principle view

### VARIO BALANCE function

Your VARIO BALANCE is operated using 6 keys that have different functions depending on context:

1. Red key: Cancel or return to initial setting
2. Green key: Confirm or proceed to next step
3. Yellow key (up/down):  
Move cursor upward/downward

Increment/decrement value.

Select letters/digits when programming.

Yellow key (right/left): When programming, move one character to the right/left.

When selecting a program location, jump five program locations forward or back at a time.

# 1. Installation

## 1.1 Connecting the VARIO BALANCE

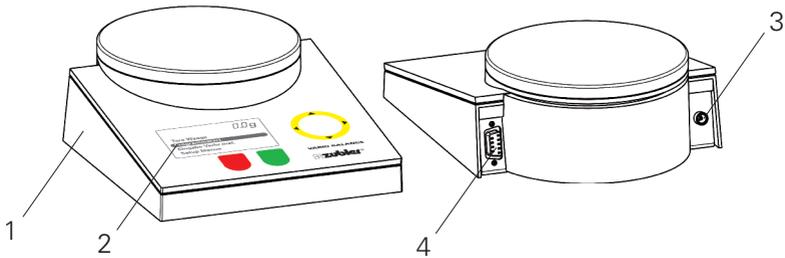


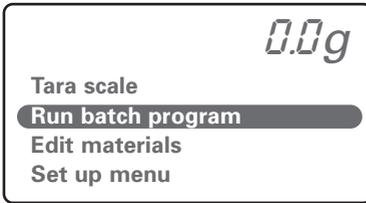
Figure 2: VARIO BALANCE, front view

- |                        |
|------------------------|
| 1 Scales               |
| 2 Display              |
| 3 AC adapter connector |
| 4 Module connector     |

- Carefully open the packing case.
- Unpack the scales and its AC adapter. In case of visible damage please contact your supplier immediately.
- Place the scales on a stable and level surface.
- Connect the AC adapter to the AC connector. on the back of the scales (left side when facing the control panel).
- Once the AC adapter is plugged in, the scales will perform a self-test, following which it will be ready to use.

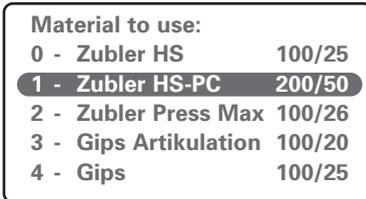
## 2. Operation

### 2.1 Using the VARIO BALANCE



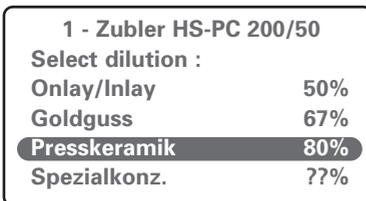
- Move the cursor with the yellow key (up/down) to Run batch program.

 **Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to the desired investment or dental stone (e. g. Zubler HS-PC 200/50).

 **Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to the desired concentration.

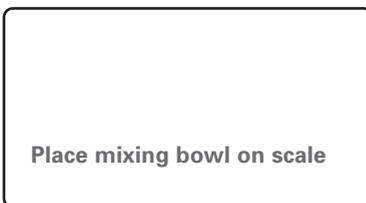
 **Confirm by pressing the green key.**

- *If you selected Special dilute:*

 **Confirm by pressing the green key.**

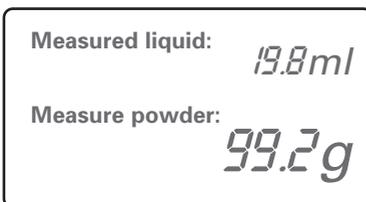
- *Select the desired concentration with the yellow key (up/down).*

 **Confirm by pressing the green key.**



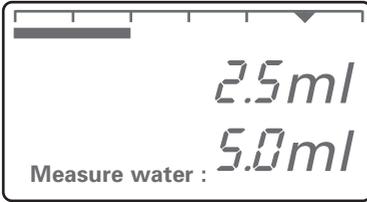
- Once you have entered the instruction,

 **Confirm by pressing the green key.**



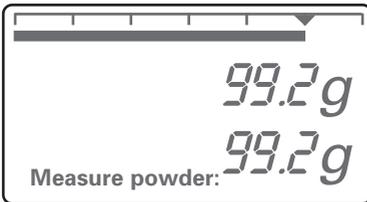
- Place 100% liquid in the mixing bowl.
- The first value indicates the current of powder.
- The second value indicates the required amount of powder (investment or stone/gypsum, depending on the selected program mode).
- Once you have selected the required amount,

 **Confirm by pressing the green key.**



- Add the required amount of water.
- Both a numeric value and a progress bar will guide you through the process until the desired mixture of liquid and water is reached.
- The first value indicates the current amount of water.
- The second value indicates the required amount of water.
- Once you have added the required amount

**Confirm by pressing the green key.**



- Add the required amount of investment or stone/gypsum.
- Both a numeric value and a progress bar will guide you through the process until the desired amount of powder is reached.
- The first value indicates the current amount of powder.
- The second value indicates the required amount of powder.
- Once you have added the required amount,

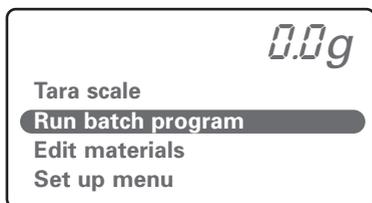
**Confirm by pressing the green key.**

2 - Zubler HS-PC 100/50		
	Soll	Ist
Liquid:	19.8	19.8
Wasser:	5.0	5.0
Pulver:	99.2	99.2
Konzentr.:	80%	80%

- Finally, the display will present a log of the calculated amounts of each constituent and the amounts that were actually added.

**Confirm by pressing the green key.**

## 2.2 Normal weighing

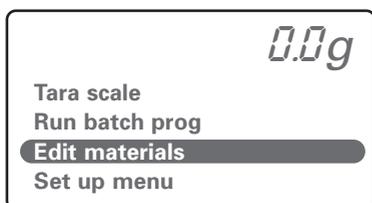


- Move the cursor with yellow key (up/down) to Tara scale.
- To reset the display to zero,

 **Confirm by pressing the green key.**

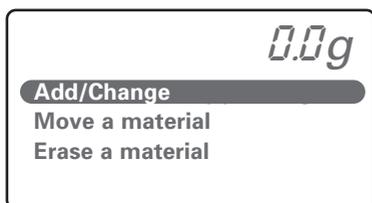
## 2.3 Programming

### 2.3.1 Add/Change material



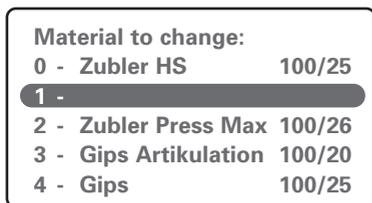
- Move the cursor with the yellow key (up/down) to Select material.

 **Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to Add/Change material.

 **Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to the desired program location.
- Use the yellow key (up/down) key to jump five program locations forward or back at a time.
- Once you have reached the desired program location,

 **Confirm by pressing the green key.**

**Material name:**

1 - Zubler

- Use the yellow key (up/down) to select the desired letter, digit or special character.
- Use the yellow key (left/right) to move to the next or previous character.
- Once you have entered the name,

**Confirm by pressing the green key.**

**Select material:**

Investment

Gypsum

- Move the cursor (yellow key up/down) to the desired material, e.g. Investment.

**Confirm by pressing the green key.**

6- Zubler Press-max 200/54

Total liq/100g 27 ml

Liquid Density

- Use the yellow key (up/down) to pre-program the total amount of liquid per 100 g.

**Confirm by pressing the green key.**

- Use the yellow key (up/down) to pre-program the density.

**Confirm by pressing the green key.**

6- Zubler Press-max 200/54

Total liq/100g 27 ml

Liquid Density 1.20

1. Use the yellow key (up/down) to select the desired letter, digit or special character for the first of three pre-programmed dilutes.

2. Use the yellow key (left/right) to move to the next or previous character.

3. Once you have entered the name,

**Confirm by pressing the green key.**

4. Use the yellow key (up/down) to pre-program the dilute.

**Confirm by pressing the green key.**

6- Zubler Press-max 200/54

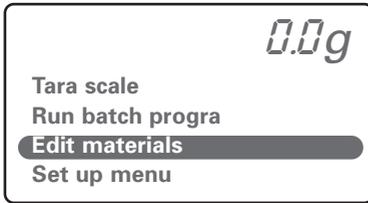
Total liq/100g 27 ml

Liquid Density 1.20

Onlay/Inlay 50%

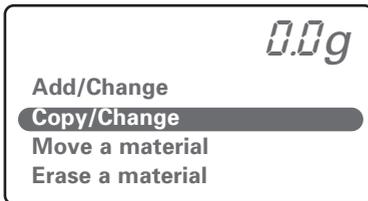
5. For the two remaining pre-programmed dilutes, proceed as shown under 1. to 4. above.

### 2.3.2 Copy/Change material



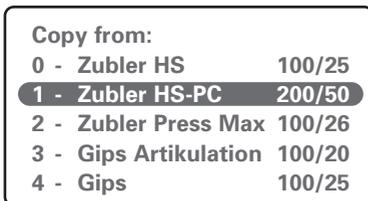
- Move the cursor with the yellow key (up/down) to Select material.

**Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to Copy/Change material.

**Confirm by pressing the green key.**

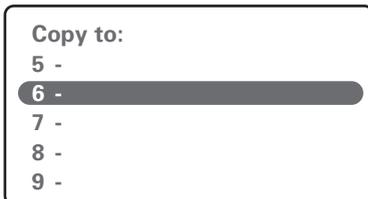


- Move the cursor with the yellow key (up/down) to the desired program location.

- Use the yellow key (up/down)key to jump five program locations forward or back at a time.

- Once you have selected the desired program location,

**Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to the desired program location.

- Use the yellow key (up/down)key to jump five program locations forward or back at a time.

- Once you have selected the desired program location,

**Confirm by pressing the green key.**

6 - Zubler HS-PC	200/50
Total liq/100g	25 ml
Liquid Density	1.20
Onlay/Inlay	50%
Goldguss	67%
Presskeramik	80%

- Use the yellow key (up/down) to select the desired letter, digit or special character.
- Use the yellow key (left/right) to move to the next or previous character.
- Once you have entered the name,

**Confirm by pressing the green key.**

Select material:	
Investment	
Gypsum	

- Move the cursor (yellow key up/down) to the desired material, e.g. Investment.

**Confirm by pressing the green key.**

6- Zubler Press-max	200/54
Total liq/100g	27 ml
Liquid Density	

- Use the yellow key (up/down) to pre-program a total liquid amount of 100 g.

**Confirm by pressing the green key.**

- Use the yellow key (up/down) to pre-program the density.

**Confirm by pressing the green key.**

6- Zubler Press-max	200/54
Total liq/100g	27 ml
Liquid Density	1.20

1. Use the yellow key (up/down) to select the desired letter, digit or special character for the first of three pre-programmed dilutes.

2. Use the yellow key (left/right) to move to the next or previous character.

3. Once you have entered the name,

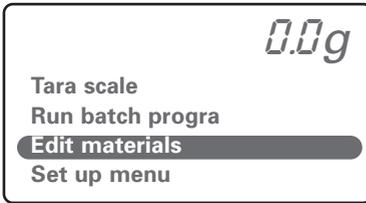
**Confirm by pressing the green key.**

4. Use the yellow key (up/down) to pre-program the dilute.

**Confirm by pressing the green key.**

5. For the two remaining pre-programmed dilutes, proceed as shown under 1. to 4. above.

### 2.3.3 Move a material



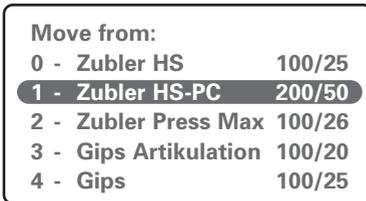
- Move the cursor with the yellow key (up/down) to Select material.

**Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to Move a material.

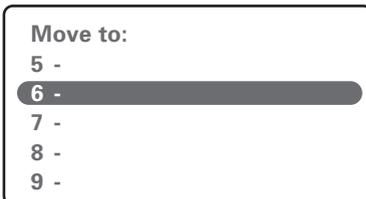
**Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to the desired program location.
- Use the yellow key (up/down) to jump five program locations forward or back at a time.

- Once you have selected the desired program location,

**Confirm by pressing the green key.**

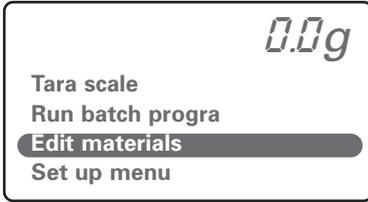


- Move the cursor with the yellow key (up/down) to the desired program location.
- Use the yellow key (up/down) to jump five program locations forward or back at a time.

- Once you have selected the desired program location,

**Confirm by pressing the green key.**

### 2.3.4 Erase a material



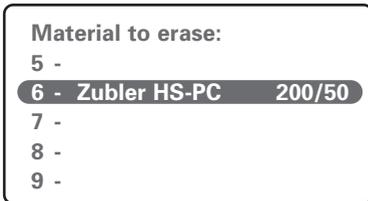
- Move the cursor with the yellow key (up/down) to Select material.

 **Confirm by pressing the green key.**



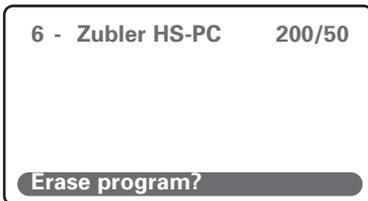
- Move the cursor with the yellow key (up/down) to Erase a material.

 **Confirm by pressing the green key.**



- Move the cursor with the yellow key (up/down) to the desired program location.
- Use the yellow key (up/down) to jump five program locations forward or back at a time.
- Once you have selected the desired program location,

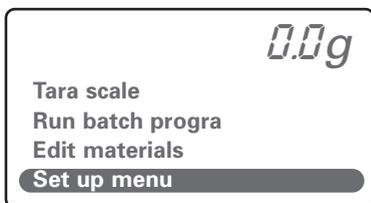
 **Confirm by pressing the green key.**



- Use the yellow key (up) to select: **Erase program? Yes**
- Use the yellow key (down) to select: **Erase program? No**

 **Confirm by pressing the green key.**

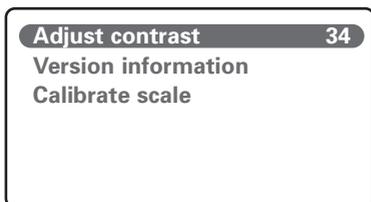
## 2.4 Set up menu



- Move the cursor (yellow key up/down) to Set up menu.



**Confirm by pressing the green key.**



- To adjust the display,



**Confirm by pressing the green key.**



- Use the yellow key (up/down) to select a contrast setting between 25 and 55.



**Confirm by pressing the green key.**

## 3. Malfunction

### **Scales does not work at all**

- Check power supply (AC adapter)
- Reset the scales by unplugging the AC adapter and plugging it back in

### **Weighing results are obviously incorrect**

- Has the scales been placed on a stable and level surface?
- Is the scales located near a device that may cause electromagnetic interference?
- Remove all materials from the scales and reset it to zero by selecting Tare scale.
- Has the scales been overloaded?

## 4. Safety instructions

- Use the VARIO BALANCE for its designated purpose only.
- Use the VARIO BALANCE indoors only.
- Do not deploy the VARIO BALANCE in the immediate vicinity of heat sources such as Bunsen burners, heating ovens etc.
- Do not immerse the VARIO BALANCE in water or any other liquid.
- Place the VARIO BALANCE scales on a stable and level surface.
- Do not overload the VARIO BALANCE. Read and comply with the Technical Specifications. Load the VARIO BALANCE only for the purpose of weighing or metering.
- Do not place the VARIO BALANCE near devices that emit electromagnetic radiation such as mobile phones or radio devices, as this may lead to incorrect readings or device malfunction.
- The bottom of the VARIO BALANCE is equipped with feet. As furniture and floor surfaces may be cleaned or treated with a variety of cleaning products, the possibility cannot be completely ruled out that these may contain chemical substances that react chemically with the material in the standing feet.
- Do not place the VARIO BALANCE where children have unsupervised access to it. Keep packaging material away from children – may cause suffocation when swallowed. Make sure that the packaging bag is not fitted over anybody's head.
- Retain the original VARIO BALANCE packaging material. Use the original material when transporting the unit. Transporting the unit in an inappropriate way will invalidate the warranty.
- In the event of defects or damage that preclude safe operation of the VARIO BALANCE, secure the device against inadvertent use.
- Unplug the AC adapter of the VARIO BALANCE prior to performing recommended and authorized maintenance or service to avoid the risk of electric shock, injury or death.
- Do not attempt to open, repair or replace a part of the VARIO BALANCE. Any unauthorized attempt to open or repair the device or to replace parts may constitute a safety risk and may invalidate the warranty.
- When servicing the VARIO BALANCE, use original replacement parts only.
- Cleaning: Always disconnect the power cord before cleaning the VARIO BALANCE. Clean by wiping down with a dry or lightly moistened cloth only. Do not use solvents.

# 5. Data

## 5.1 Technical specifications:

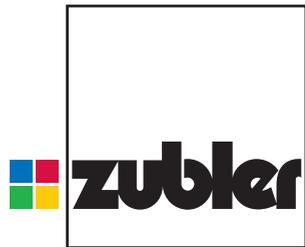
Length		215mm
Width		170mm
Height		75mm
Weight		1,1kg
Voltage	Input	100-240V, 50-60Hz, 0,3A
Max. DC output voltage	Output	9V
Max. current		500mA
Max. power input		4,5W
Max. load		2,0kg

## 5.2 Scope of delivery:

		Order. No.
Scales		898 / 420
AC adapter	Input: AC100-240V 50-60Hz; Output DC9V 800mA	208 / 020



B000xx/ 09-2011



b01.098-VARIO BALANCE-en 07-2010  
technical changes without notice!

[www.zubler.de](http://www.zubler.de)

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