

## WARRANTY CERTIFICATE

Customer Name : \_\_\_\_\_

Phone: \_\_\_\_\_ Mobile: \_\_\_\_\_

Date of Purchase : \_\_\_\_\_ Invoice / DC No: \_\_\_\_\_

Model : \_\_\_\_\_ SI.No : \_\_\_\_\_

Dealers / Agent Name \_\_\_\_\_

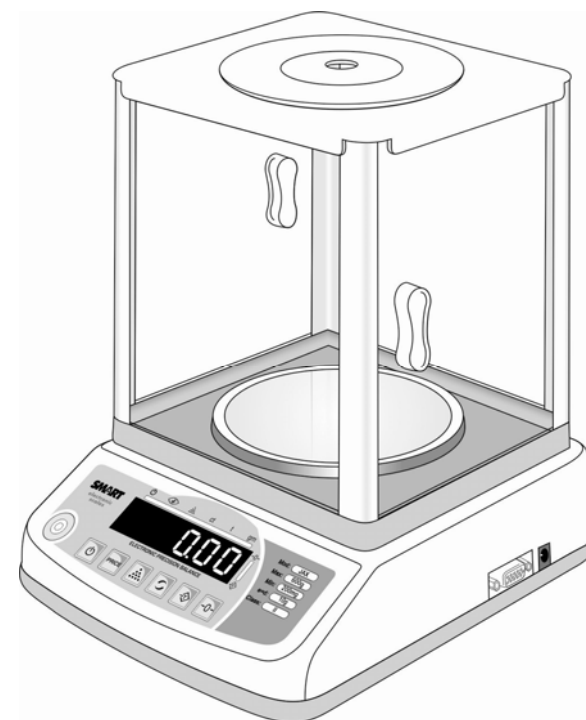
The manufacturer warrants all products shipped against defects in MATERIAL and WORKMANSHIP for a period of one year for standard line of products. All OEM and custom build orders carry (1) year warranty for MATERIAL and WORKMANSHIP. Warranty will not be applicable for Battery and adaptors. Normal wear and tear, injury by natural forces, user neglect and purposeful destruction are NOT covered by this warranty. Technical Service MUST be performed by authorized staff or factory authorized personnel. Manufacturer's obligation is limited to replacement of parts that have been so returned and are disclosed to manufacturer's satisfaction to be defective. The provisions of these warranty clauses are lieu of all other warranties, expressed or implied, and of all obligations or liability in connection with sale of said articles. Manufacturer makes no warranty of merchantability or fitness for a particular purpose. By accepting the goods, the buyer acknowledges that the buyer has determined that the goods are suitable for the buyer's purposes. In no event shall the manufacturer be liable for any sub sequential or special damages. Any misuse, improper installation or tampering shall VOID this warranty.

Product that is malfunctioning within the 1-year warranty period for scale line and 1-year warranty period for OEM products may be returned to manufacturer for Warranty Evaluation at the customers' expense. Manufacturer reserves the right to repair OR replace the components free of charge as may qualify under this warranty. REMINDER!! WARRANTY DOES NOT COVER USER DAMAGE AND ABUSE. In addition to a listing of the repairs covered under warranty, if any, the customer will be billed accordingly for all parts and labor associated with any NON-WARRANTY repairs made to the product.

## OWNERS MANUAL

# Johri Series

## PRECISION BALANCE



## Scale User's Guide

## About JOHRI Series Precision Balance

We would like to thank you for choosing us as your preferred choice for your weighing requirements. The JOHRI series weighing scale is an accurate, fast and versatile series of precision scales, loaded with time saving features and ease of customer use.

The scale is loaded with features like, automatic zero tracking, overload alarm, low battery protection, "SMART" weighing mode to filter stable results, full capacity tare, multiple units of measure, piece counting and price computing function to calculate gold rate with a press of a button.

The scales feature auto zero tracking to automatically compensate for small fluctuations in zero such as a build up of material on the platform.

### 1 TECHNICAL DATA

Precision GOLD Balances				
Measurement Data	JH-100G1	JH-300G10	JH-600G10	JH-1000G10
Capacity	100g	300g	600g	1000g
Readout / Interval	1mg	10mg	10mg	10mg
Tare range subtractive	100g	300g	600g	1000g
Repeatability	±1d	±1d	±1d	±1d
Display Resolution	1:100000	1:30000	1:60000	1:100000
All In One				
Measurement Data	JH-200G100	JH-300G100	JH-600G100	JH-1200G100
Capacity	200g	300g	600g	1200g
Readout / Interval	100mg	100mg	100mg	100mg
Tare range subtractive	200g	300g	600g	1200g
Repeatability	±1d	±1d	±1d	±1d
Display Resolution	1:2000	1:3000	1:6000	1:12000

#### Other Parameters

Application Modes	Weighing, Counting, Price / User Calculation
Product Features	Auto Sleep, 100% Tare Range, Piece Counting, Glow Control, Direct Printer Output
Keyboard	6 membrane keys [On/off, Counting, F, Mode, Tare and Zero]
Display Indicators	Stability, Zero Position, Tare, Charging Status, Percentage mode, function active, d=e/10 mode*
Weighing Units	g, carat, tola **
Calibration	Digital with external weight.
Weight	4kg Approx
Pan Size	120mm dia
Front Display Type	0.56" Bright red LED display
Remote Display	Optional, Available with 0.56" LED Display
Communication	Optional RS232C for PC communication
Stabilization	2 seconds
Power	9V AC Adaptor / built in battery for backup to 50hrs. / 70 hrs with sleep mode active
Operating Temp.	50° to 98° F / 10° to 35° C
Dimensions	164.5 x 232.5 x 164.5 (w x d x h) – including shield.

\* all in one models only, \*\* specific to country restrictions.

### 9 ERROR CODES

ERROR – DISPLAY	Error	Solution
Err 01	<ul style="list-style-type: none"> <li>Zero not in range</li> </ul>	Remove weight from pan and restart the machine. If the problem persists, the machine may have been overloaded.
Err 02	<ul style="list-style-type: none"> <li>Weight not enough for the selected setting</li> </ul>	Keep weight or Add more weight on pan for correct results.
Err 03	<ul style="list-style-type: none"> <li>Internal calibration / External variance larger than 2%</li> </ul>	You are trying to calibrate the scale with a incorrect weight.
--OL--	<ul style="list-style-type: none"> <li>Overload signaled by ADC</li> </ul>	# Check if there is excess weight on the platform # Check if the loadcell cable is damaged / check connector # Perform Internal calibration
LO BAT	<ul style="list-style-type: none"> <li>LOW Battery. Machine displays message and turns off</li> </ul>	Battery is low. Connect scale to power so that the battery can be charged.

### 10 TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	REMEDY
Scale will not power on	If running on battery, the battery may have fully discharged. AC Power cord not connected.	Connect scale to power source. Recharge battery
Battery does not give enough backup	The battery is defective. The battery may have past its useful life. (Generally 6months – 1 year)	Change the battery.
Weight reading on scale does not stabilize	External Rubbing / Friction A scale cannot measure accurately if an object is rubbing or pressing against the scale platform. Mobile interference, Vibration or wind could be other possible reasons	Move the scale away from mobile signal, breeze or vibration areas.
Scale does not show weight accurately	Improper calibration	Calibrate the scale again to and check for the problem again.

## 7 CALIBRATION

All weighing scales come pre-calibrated from the factory. However the scale may require re-calibration. Temperature changes, geographic gravity variations, altitude changes and abuse are few reasons why a scale may need recalibration. The scales can be calibrated using a known external weight.

### 7.1 External User Calibration

Step Description	Display
To start calibration turn the indicator off and then turn it on. During the count down, press and hold down the Zero button (do not release until the display shows "CAL")	CAL
Make sure there is no weight on the pan. Press Zero / Enter key and the display shows "noLoAd" momentarily and shows the counts at zero level.	noLoAd
Pause for 2 seconds at the previous step and press Zero/Enter key. The display shows "LoAd" momentarily and shows the internal counts.	322332 LoAd
Put a known weight on the weighing pan (Ex.: 100kg). Press the Enter key. The display will now show full capacity of the scale.	500.00

## 8 RS232 COMMUNICATION (OPTIONAL)

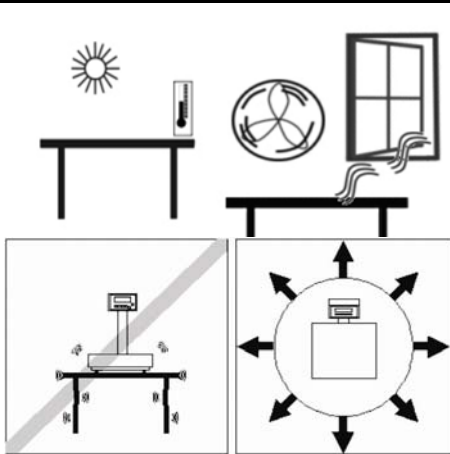
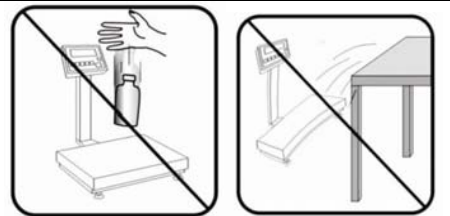
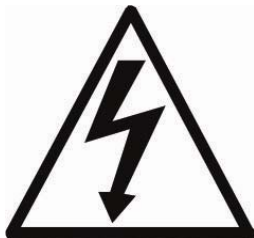
### 8.1 User Command Table

Step Description	Display
Tare The Scale	T
Zero The Scale	Z
Returns the version number of the firmware	V
Same as pressing PRINT. Send print data to peripheral device	P
Return Weight displayed on the pan	W

### 8.2 RS232 Pin Out / Protocol

Protocol	Pin Out
Baud Rate: 9600	1. NC
Parity : None	2. Data In (RXD)
Data Bits : 8	3. Data Out (TXD)
Stop Bits : 1	4. NC
	5. Ground
	6, 7, 8, 9 N/C

## 2 SAFETY & PLACEMENT OF SCALE

Step Description	Precautions
	<ul style="list-style-type: none"> <li>• Away from direct sunlight. Not exposed to high temperature variations</li> <li>• Stable, vibration-free base as horizontal as possible</li> <li>• Do not place near open windows, air-conditioning vents or fans that may cause a draft and unstable readings.</li> <li>• Keep free from vibration. Do not place near heavy or vibrating machinery.</li> <li>• The best location is a stable surface away from direct drafts, doors, windows, radiators and air conditioner vents</li> <li>• External Rubbing / Friction: A scale cannot measure accurately if an object is rubbing or pressing against the platform.</li> </ul>
	<ul style="list-style-type: none"> <li>• Never drop or throw any articles onto the scale's pan or onto any other parts of the unit!</li> <li>• DO NOT let the scale fall or drop from its tabletop surface!</li> </ul>
	<ul style="list-style-type: none"> <li>• Never attempt to repair, disassemble or modify the scale yourself.</li> <li>• Tampering with the scale may result in injury and cause more damage to the equipment.</li> <li>• Be sure to use the specified power source.</li> <li>• Do not allow foreign matter to fall into the scale.</li> <li>• If water or other liquid spills into the scale, wipe it out and clean it before putting it to use.</li> <li>• If the electronics is affected with water, unplug the power cord immediately and contact support.</li> </ul>

### 3 INSTALLATION

#### 3.1 UNPACKING

Unpack and verify that the following components have been included:

- Johri Precision Balance with accessories and Instruction Manual
- Power Adapter
- Draft Shield with glass
- REMOTE Display with cable

Save the packaging material. This packaging ensures the best possible protection for the storage or transport of the product.

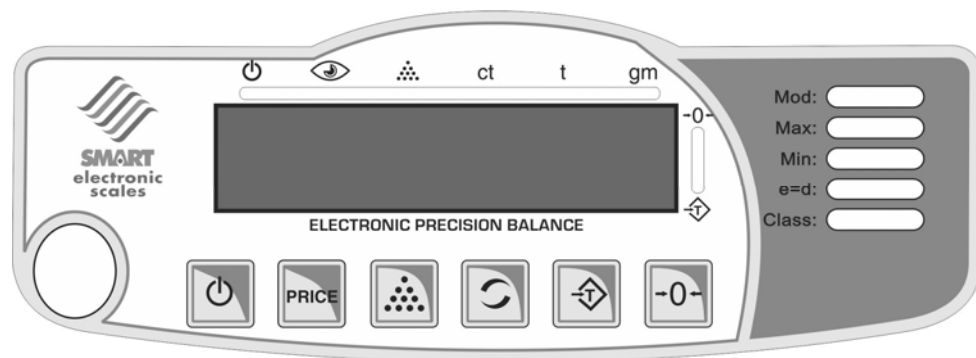
#### 3.2 POWER SOURCE

The unit works through 8.5V universal DC Adaptor to take input 110VAC~220VAC, or, through a Power cord to take an input of 180VAC~240VAC. The scale is fitted with a built in 6V 4.5Ah battery which provides backup of more than 30 ~ 45 hours depending on glow setting and sleep mode setting.

#### 3.3 CALIBRATION CHECK

Put a known weight on the machine and make sure that the indicator reads the correct weight on the display. In case of a variation in the display reading, it is recommended to calibrate the indicator again with the procedure explained in section 7.1 later in the manual.

### 4 DISPLAY / KEYS & FUNCTIONS



Press and Hold the "MODE" button and switch on the scale, display shows "CAP" now press the enter/zero button and the display shows "YES" now select between "YES" or "NO" option by pressing the TARE button and then press the zero button 7 times to accept it, if you select "YES" the capacity & accuracy of the scale will be displayed if "NO" it will not be displayed.

CAP  
YES

#### 6.4 UNITS SETTING

Step Description	Display
This function helps you to access the two different weighing modes that is CARAT & TOLA. You can deactivate any 1 or both of the above mode in which you do not want to weigh and carry on with gram mode only. Press and Hold the "MODE" button and switch on the scale display will show "CAP", now press ZERO button 2 times and the display shows "CARAT" press the Zero button once and select between "YES" or "NO" by pressing the TARE button and press the Zero button to accept it.	cArAt YES
Press the Zero button 3 times to accept it. By selecting "YES" the weight will be displayed in that particular mode which you have selected as yes by pressing the mode button while weighing and if selected as no the weight will not be displayed in that particular mode.	tOLA no

Note: Tola is available based on country specifications

#### 6.5 RANGE SELECTION

Step Description	Display
This function can enable or disable the dual range setting of your scale that is you can select the range of the scale as DOUBLE or SINGLE. For eg. If the scale's Capacity is 600g with Accuracy of 10mg and the range is selected as Double then the scale will show the Accuracy of 5mg upto half the original capacity i.e. 300g and above that it will show the Accuracy of 10mg upto 600mg. And if the range is selected as SINGLE then the scale will show its original Accuracy i.e. 10mg from 0 to 600g.	CAP rAnGE
For selecting a particular range, Press and Hold the MODE button and switch on the scale display will show "CAP" press the Zero button 6 times and the display shows "RANGE" now press the Zero button once and select between single (SIN) or double (DBL) range by pressing the Tare button and then press the Zero button once to accept the range selected.	5 in dbl

#### 6.6 DUMMY ZERO

Step Description	Display
Press and hold the Tare button and switch on the scale display shows "DUMMY 0", Now press the Zero button once and the display shows the pre selected option i.e. Yes or No, Now you can select between the YES or NO option by pressing the TARE button and press the Zero button to make your option accepted.	duMmY 0 YES no

## 5.8 PRINT FUNCTION

Step Description	Display
When a certain weight value is being displayed and is stable, keep this button pressed for three seconds. The display will now show "PRINT". Press ZERO button, the display will show "DONE" and go back to the working mode.	Pr int done

## 6 SCALE SETTINGS / USER PARAMETERS

This menu can be accessed by pressing the ZERO and the TARE buttons together. This will allow user to setup multiple parameters like PRE-TARE, Sleep Mode, Glow Control etc using this menu. Options in this menu are explained below.

## 6.1 AUTO ZERO

Step Description	Display
Press and hold the COUNTING button and then switch on the scale. The display will show "Auto 0" (Valid Values are 0.0, 0.5, 1.0, 2.0 and 3.0d). This is the auto zero setting. Press there ZERO button You can now select the value using the TARE (T) button. 3.0d means 3 divisions Default setting of Auto-Zero mode is 3d. Press Zero to save the setting.	Auto 0 2.0d







## 6.2 SCROLL / AUTO SLEEP SETTING

Step Description	Display
When the scale is switched on and it is idle, there are 2 types of modes which we can choose from i.e (a) The price value of gold as set explained in 5.4 should keep scrolling or (b) The scale should go in auto sleep mode and only decimal point will be displayed. Press and hold the price button and then switch on the scale display shows "SCROLL" press the ZERO button and the display will show "Yes" or "No". You can press the TARE button, and user can choose whether the scrolling function is required or not. If the price scrolling function is required user should select "Yes", and if it is not required then the user should select "No" by pressing the ZERO button, and the display will show "AUTO" which is the auto sleep function. Now press the zero button and the display will show "YES" or "NO" you can toggle between both the options by pressing the "TARE" button after selecting one option press the "ZERO" button to accept the entry & exit this setting.	SCROLL YES Auto no






## 6.3 CAPACITY DISPLAY SETTING

Step Description	Display
When the scale is switched on the display shows the Capacity and Accuracy of your scale scrolling, you can change this setting through this function that the Capacity and Accuracy of your scale should be shown or not at the time of switching on the scale.	

## 4.1 KEYS &amp; FUNCTIONS

SYMBOL	PRIMARY FUNCTION	SECONDARY FUNCTION
	Power on & off machine	
 COUNTING / Print Key	<ul style="list-style-type: none"> <li>Switch to piece counting mode</li> </ul>	<ul style="list-style-type: none"> <li>Initiate the Print Command</li> <li>Switch to print data entry mode. Hold the C button and switch on the scale.</li> <li>Auto zero setting - Press, Hold the Counting button and switch on the machine.</li> </ul>
 PRICE PRICE / LEFT Shift Key	<ul style="list-style-type: none"> <li>Call Price Calculation function.</li> </ul>	<ul style="list-style-type: none"> <li>Switch to Scroll &amp; sleep mode setting - Press, Hold the Price button and switch on the scale.</li> <li>Long Press - Enter price of current gold rate to use for price calculation</li> <li>Left shift the selected digit during cal or other setup modes</li> </ul>
 Mode / UP Shift Key	<ul style="list-style-type: none"> <li>Switch between weighing units</li> </ul>	<ul style="list-style-type: none"> <li>Up Shift to change option of selected digit. Ex change 0 to 1 to 2 to 3 etc</li> <li>Switch to different settings Mode. Hold the M button and switch on the machine.</li> </ul>
 TARE Right Shift Key	<ul style="list-style-type: none"> <li>Tare the weight kept on the pan</li> <li>Manual Accumulation</li> </ul>	<ul style="list-style-type: none"> <li>Right Left shift the selected digits during cal or other setup modes</li> <li>Dummy Zero Setting - Press, Hold the Tare button and switch on the machine.</li> </ul>
 ZERO / Enter Key	<ul style="list-style-type: none"> <li>Zero the weight kept on the pan.</li> </ul>	<ul style="list-style-type: none"> <li>Enter Key - Accept the selected setting and exit from setting mode.</li> <li>Press and Hold the Zero button after keeping a known weight calibrates the scale.</li> </ul>

## 4.2 ENUNCIATORS / SYMBOLS

	<b>Power LED</b> - Turn on to Green when power source is connected
	<b>COUNTING</b> - The scale is in counting mode
	<b>STABLE</b> - The weight is stable
ct	<b>CARAT MODE</b> - The scale is in carat weighing mode
t	<b>TOLA MODE</b> - The scale is in TOLA weighing mode (where available)
gm	<b>GRAM MODE</b> - The scale is in GRAM weighing mode
	<b>ZERO POSITION</b> - The scale is at zero
	<b>TARED</b> - The scale has been tared with some value

## 5 USER FUNCTIONS

- 5.1 SWITCHING SCALE - ON / OFF** The scale is switched ON / OFF by using the Power switch located on the right side of the scale. Note: Make sure there is no weight on the scale before turning on the scale.

### 5.2 TARE BUTTON

Step Description	Display
This function is to subtract the weight of actual tare. A Tare value is indicated by the "t" LED on the panel also referred as Tare LED	0.00
Place a container on the weighing pan (say 200g), then press the TARE button. The weight is tared and the machine will display zero and the tare LED will be ON.	200.00 0.00
To recall the tared weight, simply press the TARE button again. To TARE the value, again press the TARE button.	200.00

- RIGHT ARROW KEY (Secondary Function):** This is used to shift selected digit on right side while entering settable values or calibration weight or any other user parameter etc.

### 5.3 MANUAL ACCUMULATION

Step Description	Display
Keep a weight on the weighing pan(ex 200g). The display will show the weight. Now press TARE. The display will show 0.00 Now keep another weight (ex 100g), the display will show its weight.	0.00 200.00
Now press TARE. The display will show 0.00 Now keep another weight (ex 100.00g), the display will show its weight. Now press TARE button. The display will show the total of the first value tared and the second weight tared.	0.00 100.00
Press TARE button, the display will show the total of all the three weights (300.00g), press TARE button, the display will show 0.00	300.00

### 5.4 ZERO FUNCTION

Step Description	Display
Center of Zero is indicated by the "0" enunciator. You can press the ZERO/ENTER key to set the zero point from which all other weighing and counting is measured. The zero will function within 20% of the internal zero setting. The indicator has an automatic auto-zeroing function to account for minor drifting or accumulation of material on the platform. This auto-zero range can be configured in the user setup. However you may need to press the ZERO/ENTER key to re-zero the indicator if small amounts of weight are shown when the platform is empty	0.00

## 5.5 PRICE FUNCTION

This button is used to enter and calculate the total price of the material being weighed according to the price entered. This button is also used to change the settings for Rate Scrolling and Sleep mode function

Step Description	Display
PRICE ENTRY: Press and hold the Price button for 3 seconds. The display will show the pre-entered value for eg."77213" with all the digits blinking.	77213
You can change the value by pressing the Price, Counting, Mode, Tare & Zero button one at a time. Assuming you entered the new value as "10000"	10000
Once the new price value is entered press and hold the Price button for 3 seconds to accept the entry and the scale will come back in the weighing mode. Now put a weight say 100g on the pan and press Price button once. The price value of the kept weight will be calculated that is "100000" assuming the above said rate of "10000" and will be displayed with blink 3 times NOTE : The price value entered will be accepted as the price for 10g.	100.00 100000

- LEFT ARROW KEY (Secondary Function):** This is used to shift selected digit on left side while entering settable values or calibration weight or any other user parameter etc.

### 5.6 MODE

Step Description	Display
This button is used to select the different units of weight available in the scale, that is to choose between the units of carat, tola, and gram.	10.00 50.00

### 5.7 COUNTING FUNCTION

Step Description	Display
This function can be used to count items of similar /equal weight based on the average weight calculated by the scale.	0.00
Press the count button and the display will show "P 10", or it may show the count of items on the previous saved setting.	P 10
Press Mode button the display will show "P 20" which is the number of sample pieces. You can select between values of 10, 20, 50, 100 using the Mode button.	P 10 P 20
Once the number of pieces you wish to use as sample is displayed, keep the same number of pieces on the weighing pan and press the enter button. The weight of the pieces kept on the weighing pan is displayed as the number of pieces selected. Simply press the counting button once, if the user wants to exit the counting function to come in to the weighing mode.	P 20