Span Calibration Guide

S3 Indicator
EziWeigh5
EziWeigh7
ID5000
Gallagher – TW1
Gallagher – W210
Gallagher – W310/W610/W810
ShearWeigh

REFERENCE	REFERENCE DESCRIPTION	Total Pages
Work Instruction	Span Calibration Guide	31

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1 INTRODUCTION

The information contained within this document should provide suitable instruction to allow any personnel to carry out span calibration of the following:

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6. Gallagher W210/W310/W610/W810
7. ShearWeigh

2 CALIBRATION BACKGROUND INFORMATION

Span calibration uses test weights to calibrate the indicator to a specific set of load cell or load bars.

The known test weight which is used for calibration should be at least one third of the total capacity of the scale. Ideally a known test weight about equal in weight to the load or animal to be weighed is required.

During span calibration process the operator is required to set desired capacity, resolution of the scale and enter the amount of the test weight. The indicator will take two readings, one without the test weight on the platform and one with.

3 CALIBRATION PROCESS

This section details the procedure by which to calibrate the instruments.

3.1 S3 – Calibration

3.1.1 Download the MiHub Data Link app for your mobile device. Note the app is free to download.

The app symbol is 

3.1.2 Connect the S3 indicator to your mobile device or computer

3.1.3 Select the S3 indicator from the list of device that may appear

3.1.4 Select  to open settings, and choose Span Calibration.

3.1.5 Follow the on screen step to complete the span Calibration.

3.2 EziWeigh5 – Calibration

3.2.1 Ensure that the load cells are tightly connected to EziWeigh5 indicator.

3.2.2 Print and cut out template (Page13**Error! Reference source not found.**) for keys position. Place template on the top of EziWeigh5 keyboard.

Press  to turn the indicator on.

3.2.3 Press ESC and MENU buttons together.

Display will show 'SPAN.C

3.2.4 Press ENTER 

to go into the Span Calibration menu.

Display will show

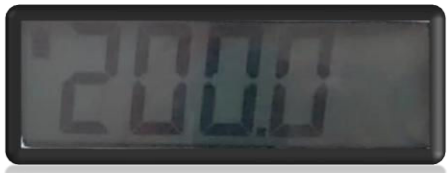
3.2.5 Press ENTER 

to see the current capacity. Type the desired capacity for the system (200.0kg) using numerical key pad template and

press ENTER 

to store.

Display will show



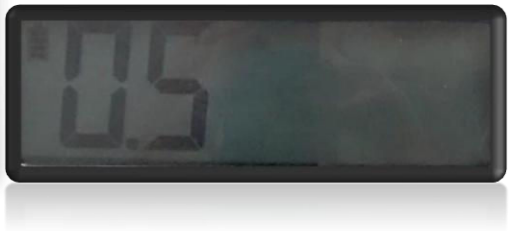
3.2.6 Press down arrow.

Display will show

3.2.7 Press ENTER 

to see the current resolution. Set cell resolution to 0.5kg by pressing up or down arrow.  

Display will show



3.2.8 Press ENTER 

to store.

3.2.9 Press down arrow 

Display will show

3.2.10 Press enter 

.

Display will show the current test weight.

By using numerical key pad type the actual test weight that will be used for calibration and press

ENTER 

to store. The weight should be at least one third of the total capacity of the scale or about equal to the typical loads that will be weighed, whichever is greater.

3.2.11 Press down arrow. 

Display will show

3.2.12 Ensure that there is no load on platform then press Enter. 

Wait until next instruction will show up on the screen.

Display will show ‘buSY for few seconds

3.2.13 The display will show ‘LoAd.

Place the test load on platform and press 

ENTER.

3.2.14 The display will show ‘buSY for few seconds.

3.2.15 If the span calibration was successful the display will show ‘donE”.

3.2.16 Press ESC 

button twice to exit the span calibration.

TEMPLATE 1


ZERO
1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
0
123 ABC
ESC
MENU
ENTER

3.3 EziWeigh7 – Calibration

3.3.1 Ensure that the load cells are tightly connected to EziWeigh7i indicator.

3.3.2 Press  to turn the indicator on.

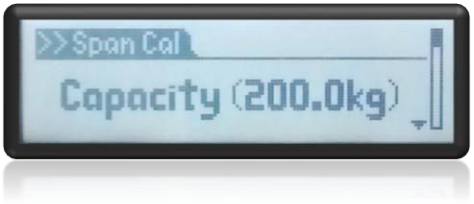
3.3.3 Press ESC and MENU 

buttons together.

Display will show

3.3.4 Press ENTER to go into the Span Calibration menu.

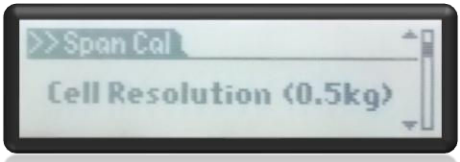
Display will show



3.3.5 Type the desired capacity for the system (200.0kg) using numerical key pad and press ENTER to store.

3.3.6 Press down arrow. 

Display will show

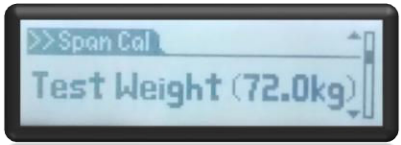


3.3.7 Set cell resolution to 0.5kg by pressing ENTER. 

3.3.8 Press down arrow  . Display will show the "Test Weight". By using numerical key pad type the actual test weight that will be used for calibration and press ENTER 

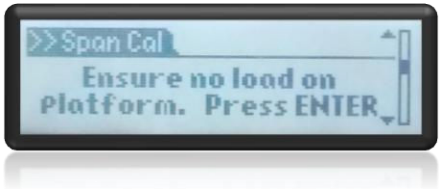
to store. The weight should be at least one third of the total capacity of the scale or about equal to the typical loads that will be weighed, whichever is greater.

Display will show the test weight



3.3.9 Press down arrow. 

Display will show



3.3.10 Ensure that there is no load on platform then 

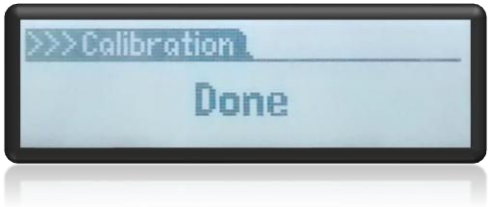
press Enter.
Wait until next instruction will show up on the screen.

Display will show

3.3.11 Place the test load on platform and press ENTER.

Display will show

3.3.12 If the span calibration was successful the display will show “Done”.



3.3.13 Press ESC 

button twice to exit the span calibration.

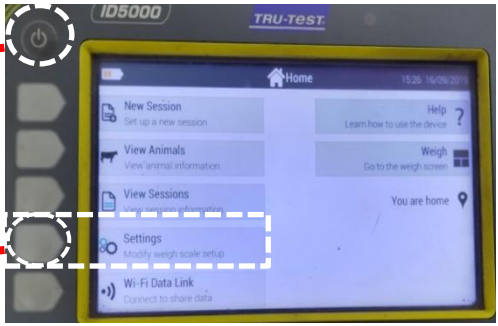
3.4 ID 5000 - Calibration

3.4.1 Screw the load bars connectors securely to the correct positions

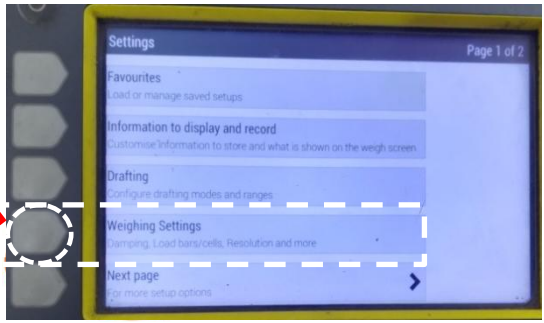
Load bar connectors

3.4.2 Turn on indicator with power button.

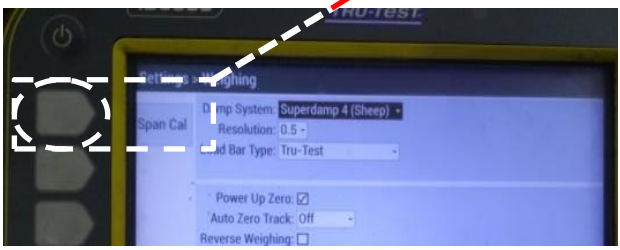
3.4.3 Start at the home screen, select the settings page, by using the grey button at the side.



3.4.4 Select Weighing settings, by using the grey button at the side



3.4.5 Select Span Cal, by using the grey button at the side.

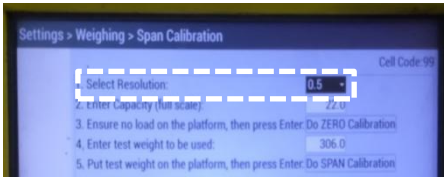


3.4.6 Select 0.5 resolution.

Press enter 

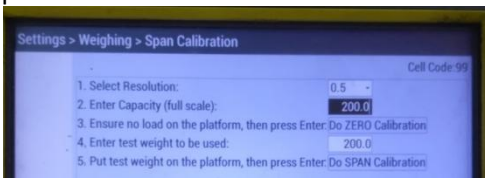
to access the drop down box.

Use down arrow to select 0.5 resolution.



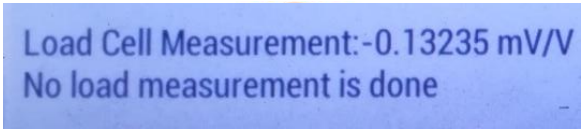
Press enter to confirm selection.

3.4.7 Enter capacity (full scale) of 200.0 using the keypad, press enter to confirm.

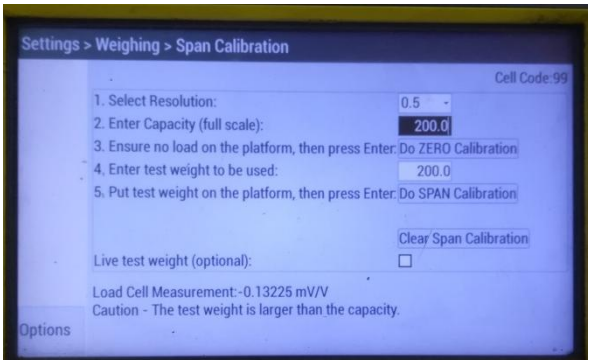


3.4.8 Carry out zero weight calibration. DO NOT touch weight scale while calibration is being carried out. Press enter to start calibration. Screen will display “No load measurement is done”

Screen display:



3.4.9 Enter the test weight into ID5000, add test weight to weigh scale, keeping central for best accuracy.



3.4.10 Press enter to start span calibration. DO NOT touch weigh scale while calibration is being carried out. Screen will display “Test weight measurement is done”

3.4.11 Remove weight when completed.

3.4.12 Return to weighing screen, using the back key  .

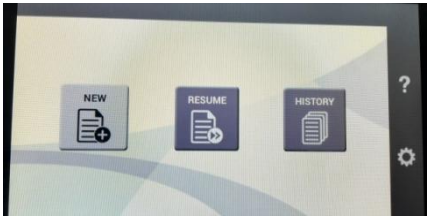
Test weigh scale with known weight to verify calibration.

3.5 Gallagher TW1 – Calibration

3.5.1 Connect load bars to the Gallagher indicator connectors using Y piece Gallagher adaptor cable manufactured and supplied by Ritchie.

3.5.2 Turn on the indicator, using the power button. 

3.5.3 Tap on the  Icon to open settings menu.



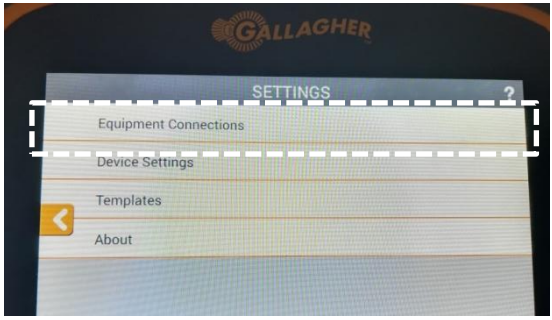
3.5.4 Tap Equipment Connections to enter the selected menu.

3.5.5 Tap the "***Loadbar name***" or select a "**Create Custom**" and follow indicator wizard

3.5.6 Tap "***Advanced***"

3.5.7 Tap "**Span**"

3.5.8 Follow the configuration wizard of the indicator



3.6 Gallagher W210 – Calibration

3.6.1 Ensure the load bars are connected to indicator using Y piece Gallagher adaptor cable manufactured and supplied by Ritchie. Ensure no load and is free from obstruction

3.6.2 Hold down **GREEN** and **BLUE** buttons at the same time. Turn the rotary knob from **OFF** to **FINE**.

Screen will show "**CAL**"

3.6.3 Check there is no load on the loadbars and press the **BLUE** button.
The **ZERO** icon will be displayed once zero load has been captured.

3.6.4 Add any known weight up to 200kg to the scale. Once the load is stable, press the **GREEN** button.

Screen will show calculated weight

3.6.5 Press the GREEN button to increase shown weight to known test weight. Press **BLUE** button to decrease shown weight. (*Adjustment in 1kg increments*)

3.6.6 Once display weight equals the know test weight, turn rotary knob from **FINE** to **AUTO.**

Display will read "**SAVE**"

3.6.7 Press the **GREEN** button to save the new span value

3.6.8 To exit the span calibration without saving the new valve, turn the rotary knob to **OFF** before pressing the **GREEN** button.

3.7 Gallagher W310/W610/W810 – Calibration

3.7.1 Ensure the load bars are connected to indicator using Y piece Gallagher adaptor cable manufactured and supplied by Ritchie. Ensure no load and is free from obstruction

3.7.2 Turn the rotary knob to **SETUP.** Select **USER OPTIONS** using the soft keys.

3.7.3 When the user options screen is displayed carry out the following key sequence:

WEIGH → DELETE → ZERO → ZERO → DELETE → RIGHT HAND SOFT KEY

3.7.4 The engineering option screen will display.
Select "**Change Span**" and press "**Select**"

3.7.5 For W610/W810 indicators choose "**RESPAN**" using soft key **F5**

3.7.6 Check that there is no load on the loadbars and press the **BLUE** button. The **ZERO** indicator will come on once the zero has been captured

3.7.7 Apply any known test load up to 200kg to the scale. Once the valve has stabilised press the **GREEN** button. The calculated weight will display on the lower screen

3.7.8 Use the arrow key or key pad to adjust the displayed span weight to the known test weight. For the W310 use the **DIGIT** key to change the digit position in the span weight valve.

3.7.9 Press soft key **F5** or **OK** to save the new span value

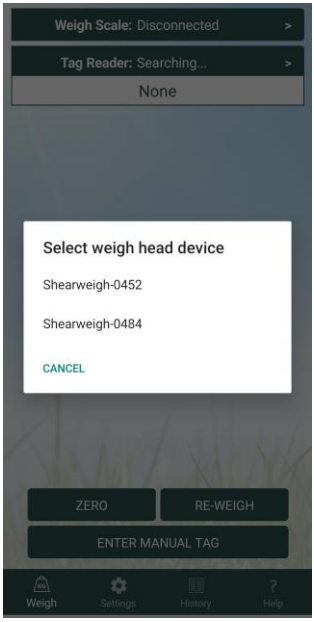
3.7.10 To exit the span calibration without saving the new valve, turn the rotary knob out of **SETUP** before accepting the test weight value. The scale will default to normal operation without saving the new value.

3.8 ShearWeigh

3.8.1 Download and install the **ShearWeigh** app from play store/Appstore.

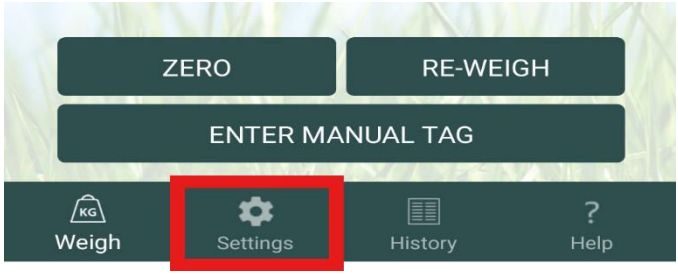
3.8.2 Connect load bars to the ShearWeigh indicator and turn on the indicator by pressing power button.

3.8.3 Run the ShearWeigh application and tap on Weigh Scale and select the indicator to connect.

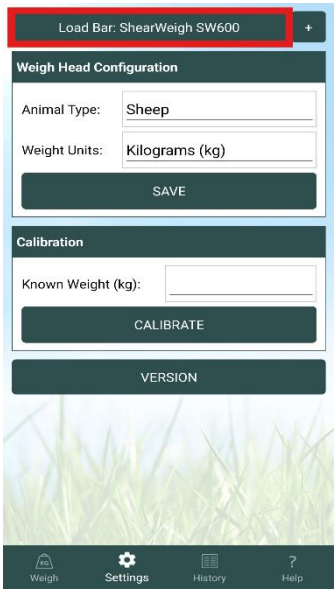


3.8.4 Once connected, the Bluetooth light on the indicator will illuminate. Weigh Scale on app will display indicator model number.

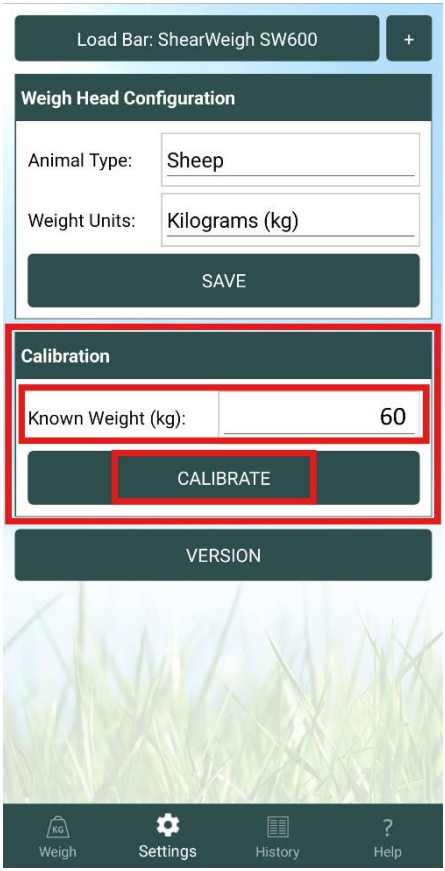
3.8.5 Tap on settings icon at the bottom of the screen.



3.8.6 Tap on Load Bar on top of the screen, select the desired load bar and press back to save the load bar settings.



3.8.7 To calibrate for load bars not mentioned in the load bar list, tap on settings (see 3.7.5). Place known weight on load bar and enter the weight value under **Calibration** and press **Calibrate**.



3.8.8 Once the load bar selection / calibration is complete, tap on weigh icon at the bottom of the screen to start weighing the animals.