

AGRIEID CATTLE AND LIVESTOCK SCALES INSTALLATION GUIDE



Equipment Supplied: AgriEid Cattle and Livestock Digital Scales

- (2) x Load Cells with 2.5m cable to connect load cells to junction box
- (2) x Load Cells with 3.0m cable to connect load cells to junction box
- (4) x Load Cell Spacers + (8) Bolts with washers
- (1) x Junction Box
- (1) x Quick Connect Cable (Junction Box to Indicator)
- (1) x Digital Weight Indicator (Stainless Steel Casing)



Here is a summary of the quick 5-step installation process:

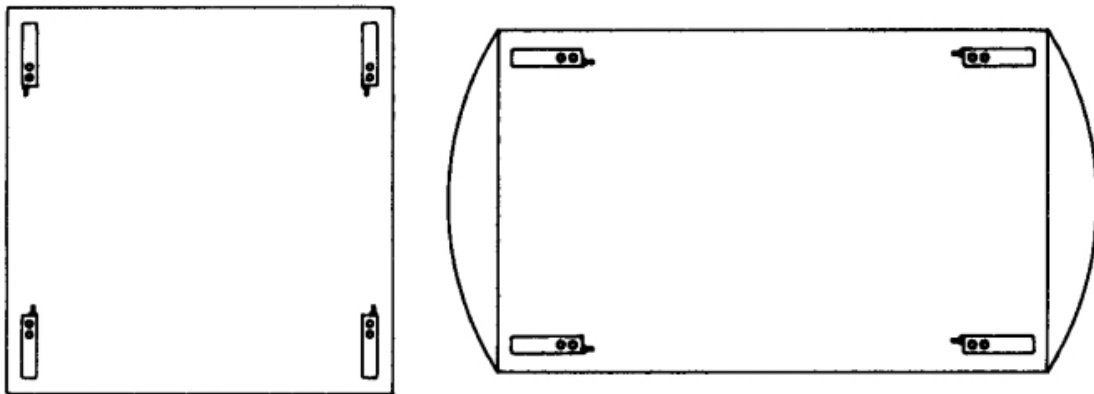
1. Build a rigid platform from timber or steel.
2. Mark locations on the platform for the 4 x load cells.
3. Wire the 4 x load cells to the junction box and digital indicator.
4. Attach the load cells to the platform using high tensile bolts.
5. Calibrate the scales using a test weight

Please follow this guide closely (next few pages) and if you encounter any issues please just send us a quick email to info@agrieid.com

Step 1 : Build a rigid platform out of hard wood or steel to hold the estimated max weight of the livestock being weighed.



Step 2 : Turn the platform upside down and use the spacers provided to drill 2 x holes at each corner of the platform. Space these holes and the load cells close to the edge of the platform.

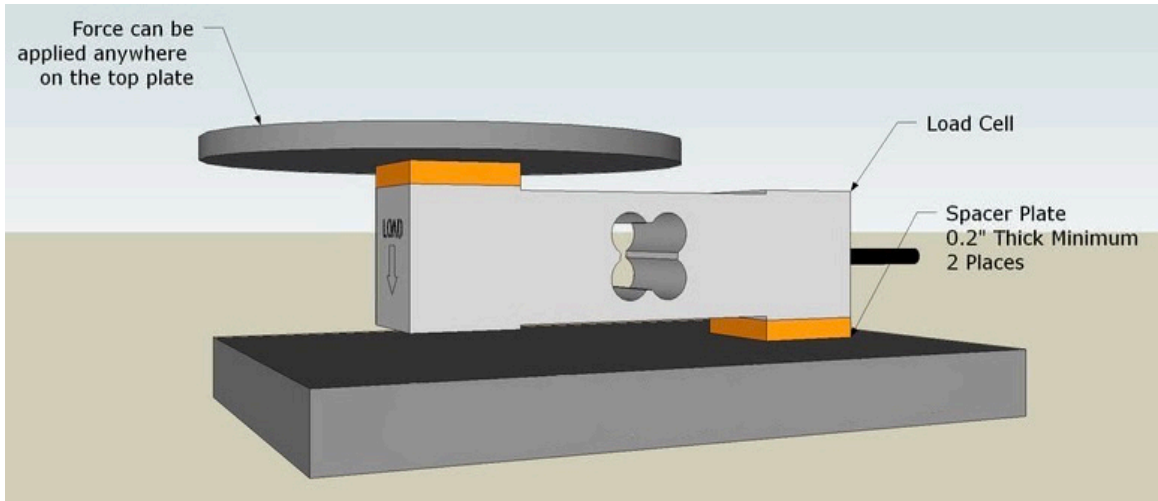


If using steel – weld the (4) mounting brackets provided to the platform prior to attaching the load cells with high tensile bolts.

DO NOT WELD THE BRACKETS WITH THE LOAD CELLS ATTACHED as they will be destroyed by heat damage

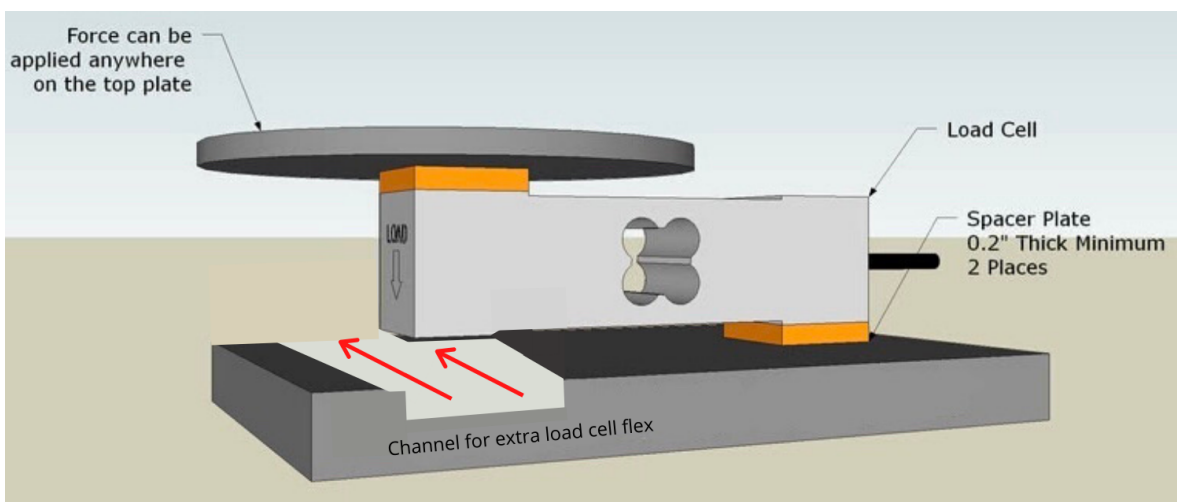
If using a hardwood timber platform – purchase (8) high tensile bolts (Size 12) measured accurately for the required platform width to secure the load cells to your new platform.

Step 3 : Bolt the load cells onto the platform with the provided 2mm steel spacers. Ensure the spacers are fitted between the platform and the top of the load cell to give the load cells plenty of room to take an accurate reading.



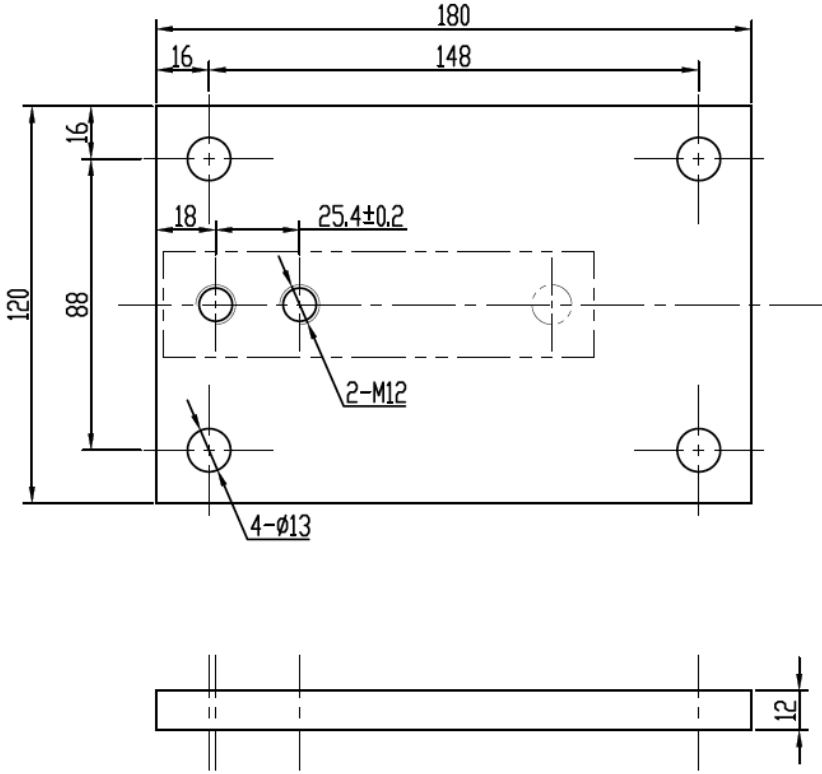
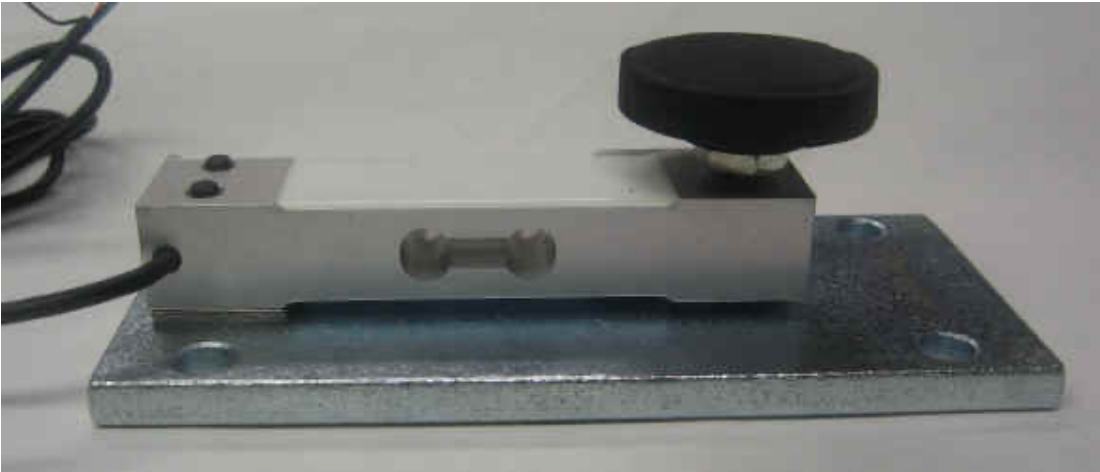
If installing on a timber platform – add a channel so the load cell has more room to take a reading with less chance of touching the platform.

This will reduce the chance of any reading errors to the indicator over time as the timber may change shape (warp and twist) over time.



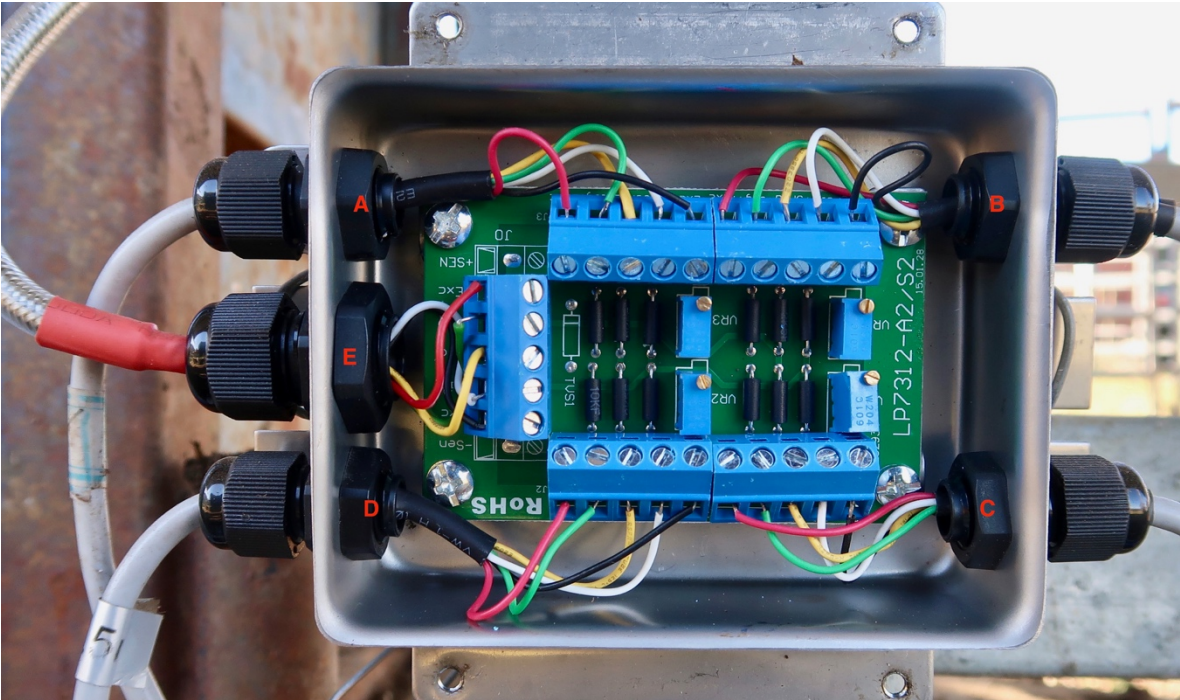
Create a channel for extra load cell flexibility to take accurate readings when installing on a timber platform.

For extra rigidity with load cell installation you may consider bolting onto the platform a steel plate as detailed below (channel not required):



Step 4 : Each of the 4 cables needs to be screwed into the appropriate position in the junction box and must match the load cell position on the platform (see below diagram).

The digital weight indicator has a 3 metre long quick connect cable that is connected to the center slot on the left hand side of the junction box (cable with a Red rubber seal and marked **E** below).



Connect the Digital Weigh Indicator cable to the center slot on left provided (as above)
Connect load cell cables in this colour order: Black, White, Yellow, Green Red

Load cells are positioned on the platform (see below) to match the ABCD cell wiring (above)



A and B - FATHEREST LOAD CELLS FROM JUNCTION BOX (3.0 M cables)
D and C - CLOSEST LOAD CELLS TO THE JUNCTION BOX (2.5 M cables)

Step 5 : CALIBRATION :

Once the individual load cells have been firmly bolted to the platform and the cables connected you will need a test weight to check and calibrate the indicator to be sure it is delivering an accurate reading.

If the displayed weight is not correct complete the following simple calibration to get the system operational.

Stand on the platform using your own body weight or the person who may be assisting you.

To Open the **Main Menu** – press **HOLD AND PRINT AT SAME TIME**

To Navigate Up and Down – use **Tare** and **Zero** buttons

(see arrows buttons in diagram below)

To Navigate Left and Right – use **Count** and **Gross**

(see arrows buttons in diagram below)

To **Enter** – use the **Print** button (see diagram below)

To **Exit** – use the **Total** button (see diagram below)

To go Back – use the **Hold** button (see diagram below)



DIGITAL INDICATOR SET-UP

Menu : **Hold** and **Print** buttons pressed at the same time then

C1 – Select '1' then **ENTER** (SETS TO KG)

C2 – Select '1' then **ENTER** (ONE DECIMAL PLACE)

C3 – Select '5' then **ENTER** (GRADUATION)

C4 – Enter '1000' KG (OR THE MAXIMUM WEIGHT YOU REQUIRE)

SCALE CALIBRATION

Open Menu – Press **Hold** and **Print** buttons at the same time

STEP 1 – Zero Calibration

Select **C5** – Then select '1'

ENSURE **NO** WEIGHT ON THE PLATFORM – THEN PRESS **ENTER**

The indicator will auto countdown from 10 to 0 (CAL 10 to CAL 0)

Zero calibration is completed when the indicator displays **0.0**

STEP 2 – Weight Calibration

Stand in the centre of the scale platform (know your exact weight)

Select **C6** – Then Select '1' and then press **ENTER** (print button)

THEN **ENTER** THE **EXACT** WEIGHT ON PLATFORM IE '100' KG
THEN PRESS **ENTER** – LET THE COUNTDOWN RUN

WHEN **CALEND** IS DISPLAYED (CALIBRATION HAS COMPLETED)

THEN SELECT **EXIT** TO SAVE THE CALIBRATION SETTINGS

STEP 3 – Animal Hold Function

C11 – Enter '4' (ANIMAL HOLD FUNCTION)

C12 – Select **3** or **5** second hold (ANIMAL HOLD FUNCTION)

Technical Tips and Trouble Shooting

Ensure the platform is a snug fit into the crush and movement forward and backwards is minimized. The less the platform can move around the more accurate the readings. Cattle will be extremely hard on the platform so it is important the platform cannot move around in the crush. You might also want to consider making the platform non slip by making some grooves in the timber or attaching some cross beams or fixing non-slip material on the top of the platform.

Ensure the platform is level (use spirit level) and adjust the 4 x feet to make it as level as possible for the most accurate readings.

After using the platform and scales you will see how to best secure the platform to minimize movement by adding additional timber or braces etc as required. Ensure movement up and down is not restricted.

Note : The more weight you can add to the platform the more accurate the indicator calibration ie 300-400 kg is recommended as this is the around the average weight of a small to medium sized cow.

As cows are an average weight of 300-600kg – you can set the maximum weight reading on the indicator to 1000 kg and use 400kg to calibrate and check the scales are reading this weight correctly. Less weight can be used as mentioned above (10% of max) say 100kg but 300-400kg is recommended to really get the most accurate results.

Weights should be checked and verified using another set of scales (ie bathroom scales) before putting on platform – you can use tractor weights, gym weights, bags of concrete, concrete blocks, feed / seed / fertilizer bags, 20l buckets etc Anything you can get an accurate weight of that can be easily added to the platform for final calibration.

Remember less movement = more accurate readings.

If the scales are not working on start-up and you are getting ERR6 (Exceed zero range), set **C21=10**. (Refer Page 19 of the operation manual). This is also a common error if the load cells are touching the platform – build a channel or add a steel plate (see previous instructions).

Please see **Page 26** of the indicator operation manual for known errors and recommended solutions. (Manual can be downloaded from support on agrieid.com)

Calibration Additional info - refer **Page 15** and **16** in the enclosed weigh indicator operation manual for a step by step guide to complete scales **calibration**.

For additional support information please check the [support](#) page on agrieid.com for latest installation guides, product manuals and support videos.

Any technical support assistance – please just email info@agrieid.com