



DAIRY SCALE

XDS5000

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DairyScale Installation Manual
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INTRODUCTION

The DairyScale is specifically designed to accurately weigh live dairy animals as they walk over the Weighing Platform set. You may also weigh static loads.

Important

Gallagher recommends you read the whole Installation section prior to planning each DairyScale installation. The location of the Chicane, Weighing Platform set and Panel Reader are inter-related, and for each installation you will need to determine the best configuration.

This manual

This manual describes how to install the XDS5000 Gallagher DairyScale into new and existing Dairy sheds.

Model XDS5000

The **XDS5000** includes:

- Weighing Platform set,
- Scale head,
- Power supply,
- Panel reader,
- MyScale Pro software.

INSTALLATION

Planning the Installation

During the planning of your DairyScale installation, you need to determine the location and installation requirements for the following components:

1. **Power Supply**
Provides the 12V supply to the Scale and Panel Reader.
2. **Purpose built Chicane**
The Chicane is designed to slow and separate the animals so that the weighing events can occur at the optimal time spacing.
3. **Panel Reader**
This automatically reads the Electronic ID tag attached to the animal and passes that information onto the Scale to be stored with the weight.
4. **Weighing Platform set**
Composed of two platforms, Lead-on and Main.
5. **Scale head**
The Scale stores all collected data. The data in the Scale can be downloaded from the Scale onto a computer.

The Scale can also produce a real time output of EID number and valid weight as each animal is weighed.

Installation considerations

While planning the installation, take the following into consideration:

- Cows should be weighed after milking.
- The Panel Reader needs to be mounted so it can reliably read the herd's Electronic ID tags as they walk over the Weighing Platform set. Take care to ensure the Panel Reader can not read the Electronic ID tags of animals passing nearby.
- Consider the drainage requirements around the Weighing Platform set as this needs to be hosed down regularly.
- The concrete under the Weighing Platform set should be as level as possible.
- The Lead-on platform should be located as close as possible to the exit of the Chicane.
- The leading edge of the Panel Reader antenna must be mounted 1100 mm from the leading edge of the Main platform.
- Nothing should delay the animal from exiting the Main platform.

Power supply installation

The Gallagher supplied Power Supply provides 12V to power the following components:

- Scale
- Panel Reader.

The Weighing Platform set is powered from the Scale.

Refer to *Power Supply specification* (p 33).

Procedure - Installing the Power Supply

1. Install the Power Supply in a cool dry place, close to a power point.
2. Run the 12V cable from the Power Supply to the Scale.

Gallagher recommends that all cabling is mounted within conduit or similar to protect it from being damaged by animals, UV light, the weather and the dairy shed environment.

Refer to *Power Supply specification* (p 33) for details on the maximum voltage drop allowed.

3. Connect the cable to the Power Supply.
4. Temporarily terminate the power cables at the Scale end, ready to be connected later.

Race and Chicane installation

The purpose of the Chicane is to slow and separate the animals so the weighing event can be captured reliably.

If animals are presented at the Main platform too fast, either incorrect weights will be captured or weights will not be captured.

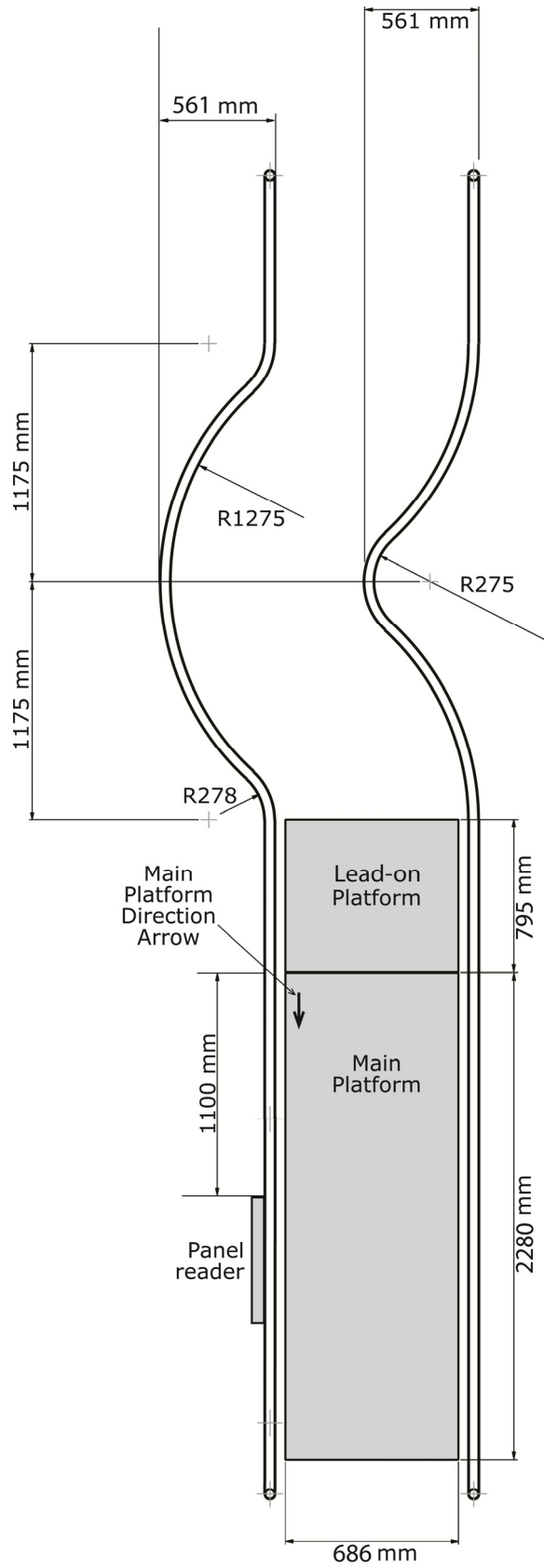
Note: The concrete under the Weighing Platform set must be as level as possible. The Weighing Platform must be level and both platforms must be even in height.

Chicane dimensions

The following is a diagram of an **ideal** chicane. Use this as a base for the design of each installation.

Note: The Lead-on platform must be located as close as possible to the end of the Chicane to maximise its effectiveness.

Gallagher recommends that the leading edge of the Lead-on platform is placed no greater than 200 mm from the end of the Chicane.



Chicane and Weighing Platform dimensions

Weighing Platform set installation

The Weighing Platform is composed of two platforms:

- Lead-on
This platform alerts the Scale of an upcoming weighing event.
- Main
This platform weighs the animal as it walks across.

Procedure - Installing the Weighing Platform set

Warning: The Weighing Platform set is delivered with the cables coiled underneath. Ensure these cables are not damaged during the installation process.

Materials

- Dyna bolts - Galvanised, 12 mm x 25 mm if direct on to concrete or 12 mm x 100 mm if spacers are required.
- Electric drill with masonry drill bit

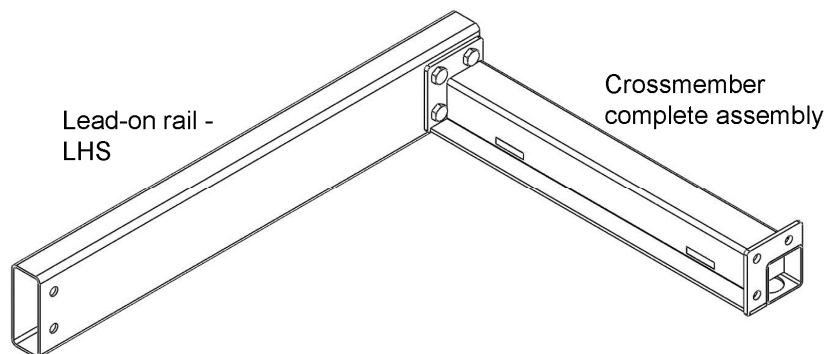
Step 1 - Assembly of the Scale Lead-on Frame

Important:

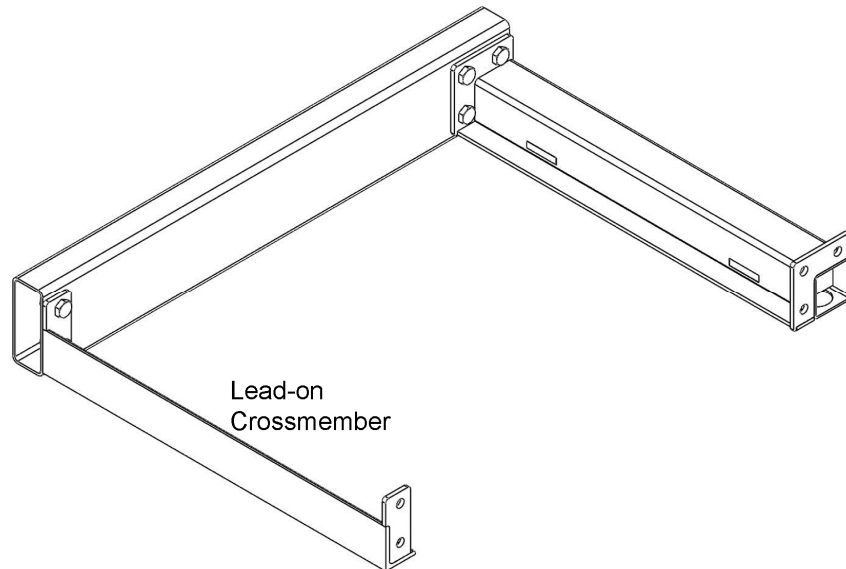
- When attaching each part with the M12 x 25mm galvanised bolts – ensure a heavy flat washer and a spring washer is fitted inside the rail.
- Do not fully tighten the bolts in the assembly stage.

Procedure

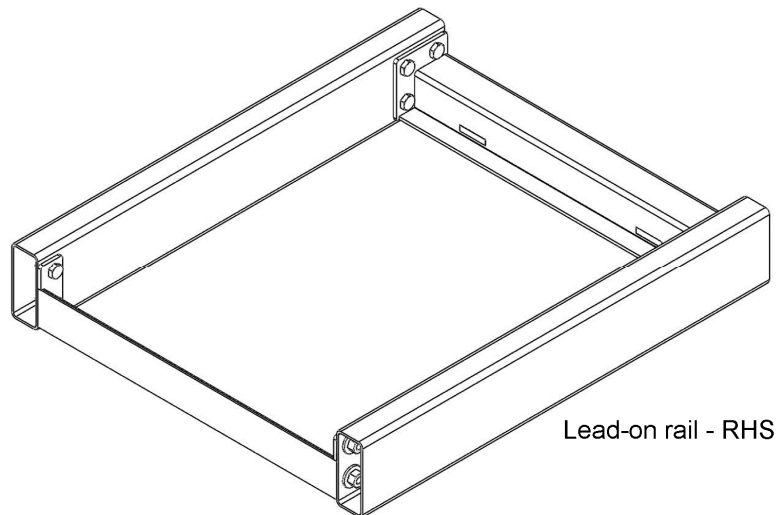
1. Attach the Lead-on Rail LHS (Left Hand Side) to the Crossmember Complete Assembly, using 3 x M12 x 25mm galvanised bolts.



2. Attach the Lead-on Crossmember to the other end of the Lead-on Rail LHS as shown, using 2 x M12 x 25mm galvanised bolts.



3. Attach the Scale Lead-on Rail RHS (Right Hand Side) to the unattached ends of the Lead-on Crossmember and the Crossmember Complete Assembly, using 5 x M12 x 25mm galvanised bolts.



4. Place the frame assembly on a flat surface ensuring that the rails are parallel and **fully tighten** all of the bolts.

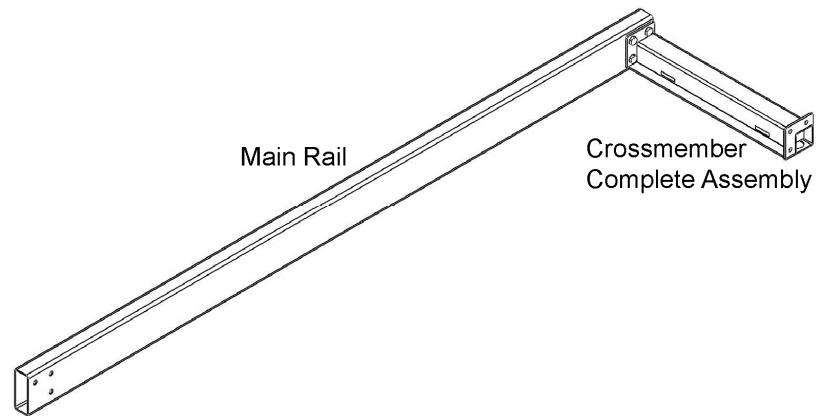
Step 2 - Assembly of the Scale Main Frame

Important:

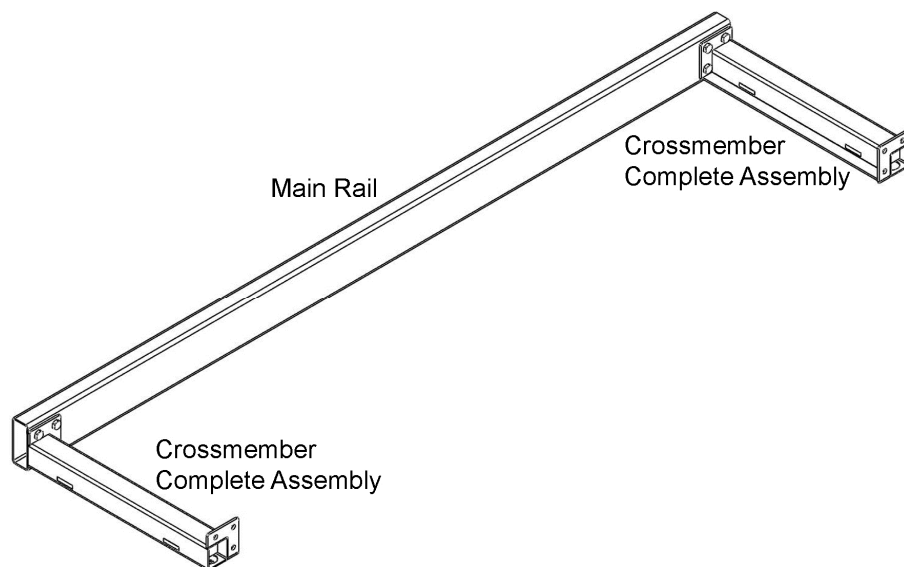
- When attaching each part with the M12 x 25mm galvanised bolts – ensure a heavy flat washer and a spring washer is fitted inside the rail.
- Do not fully tighten the bolts in the assembly stage.

Procedure

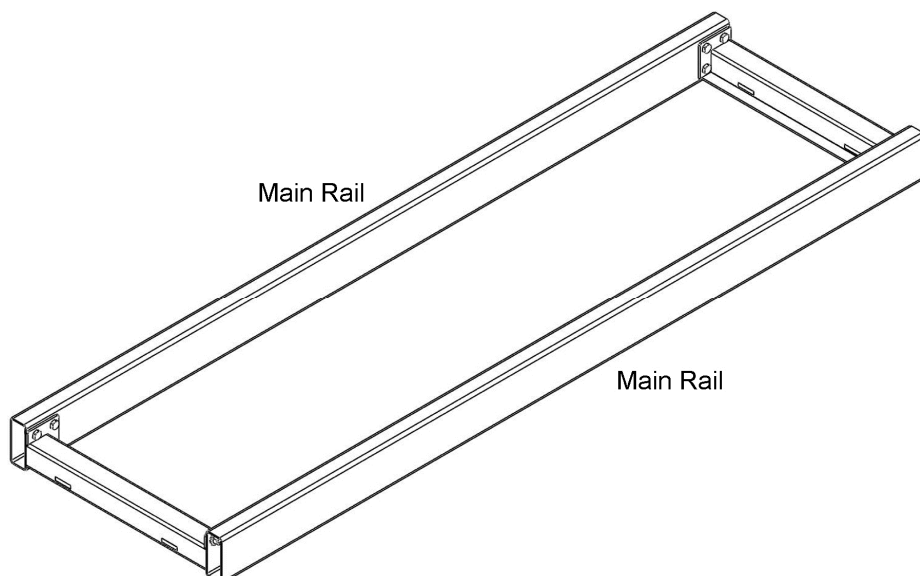
1. Attach the Scale Main Rail to one of the Crossmember Complete Assemblies using 3x M12 x 25 galvanised bolts.



2. Attach the second Crossmember and attach to the Main rail using 3 x M12 x 25 galvanised bolts.



3. Attach the second Main Rail using 6 x M12x25 galvanised bolts.



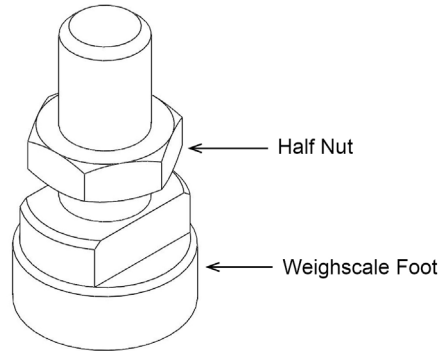
4. Place the frame assembly on a flat surface ensuring that the rails are parallel and **fully tighten** all of the bolts.

Step 3 - Installing the Foot Assemblies

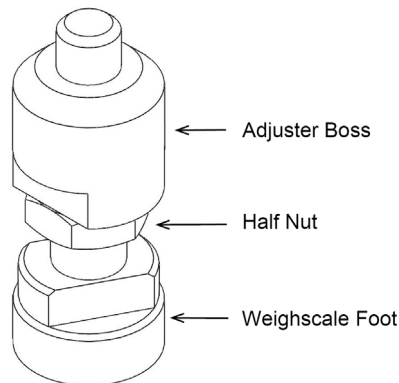
This procedure describes how to create and install a crossmember foot assembly and load cell foot assembly.

Procedure

1. Take a M14 Half Nut and a Weigh Scale Foot and thread the nut all the way to the bottom of the foot, but do not fully tighten.



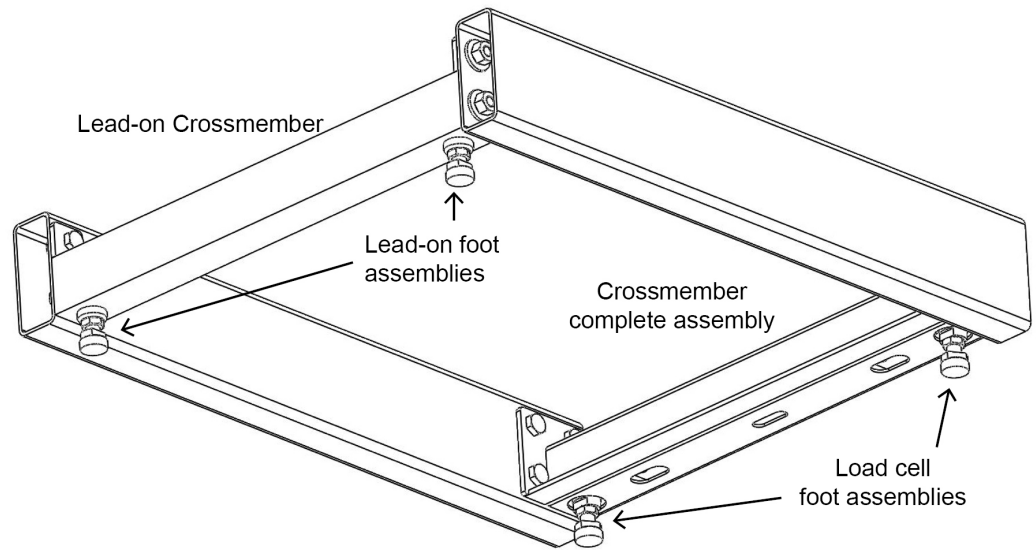
2. Repeat this a further 7 times, so there are eight assemblies.
3. Two of these assemblies form the **Lead-on foot assemblies**. Put these to one side.
4. With the remaining 6 assemblies, thread each one onto an Adjuster Boss, but do not fully tighten. These 6 assemblies form the **Load cell foot assemblies**.



Lead-on Frame Foot Assembly

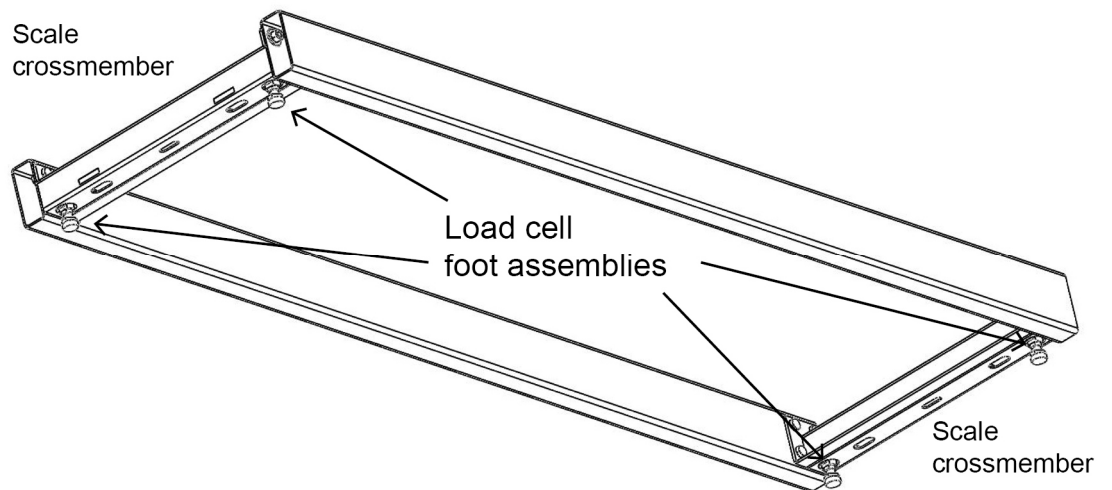
1. Attach the 2 **Lead-on foot assemblies** to the Lead-on Crossmember.
2. Attach 2 of the **Load cell foot assemblies** in to the load cells in the Crossmember Complete Assembly.

3. Tighten the adjuster boss securely on to the load cell.



Main Scale Frame Foot Assembly

1. Attach the 4 remaining **Load cell foot assemblies** to the load cells in the Main Scale Crossmember.
2. Tighten the adjuster boss securely on to the load cell.



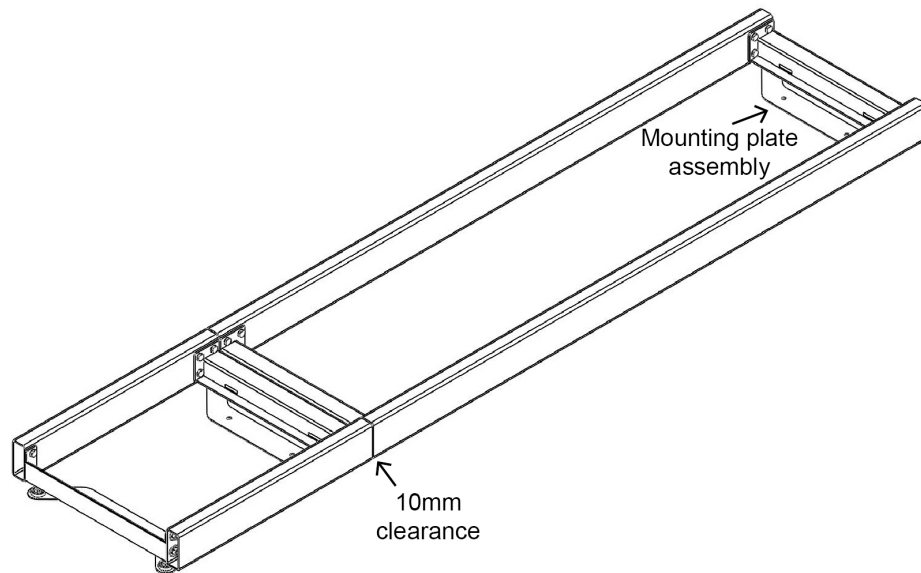
Important:

Once the feet are inserted into the frame assemblies, be very careful not to let the frames drop feet first on to the ground, as this may result in damage of the load cells.

Step 4 - Mounting the Frames

Procedure

1. Take the Scale Mounting plate assemblies and place under the feet of both the Lead-on frame and the Main frame.
2. Position the frames centrally in the exit race and position as shown, in such a way, that the cows are travelling on to the lead-on platform before the main platform. **Ensure there is 10mm clearance between the two frames.**

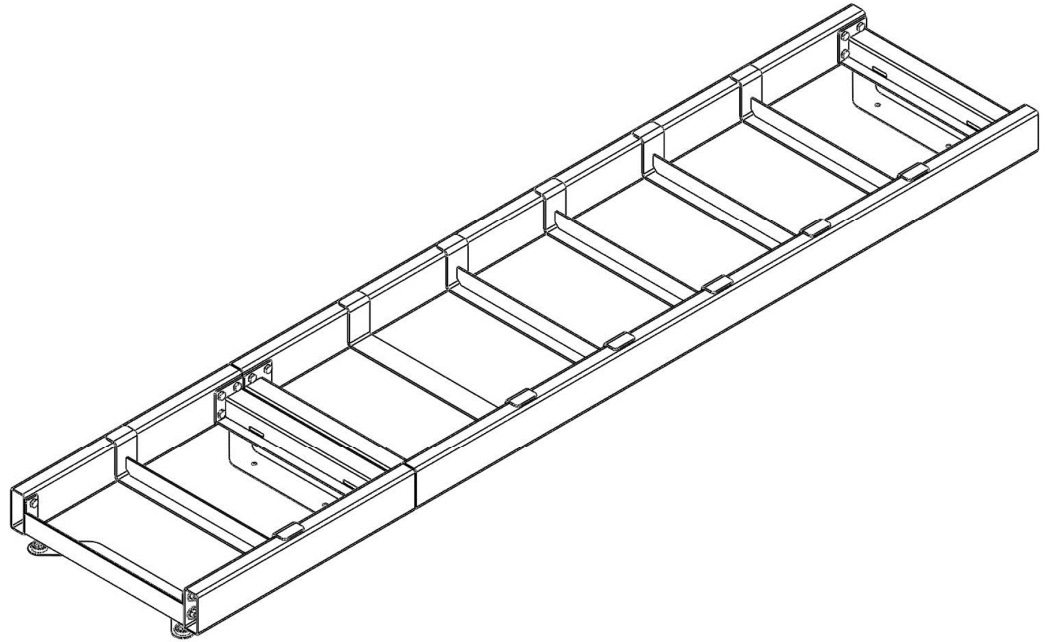


3. When satisfied with the positioning of the Frame assemblies, fix the mounting plates in to position using the M10x60 Excalibur bolts.
4. Adjust the feet so the frames are evenly supported at all corners.
5. When satisfied with the levelling of the feet, tighten the M14 half Nuts on the feet, so they prevent the feet from moving.

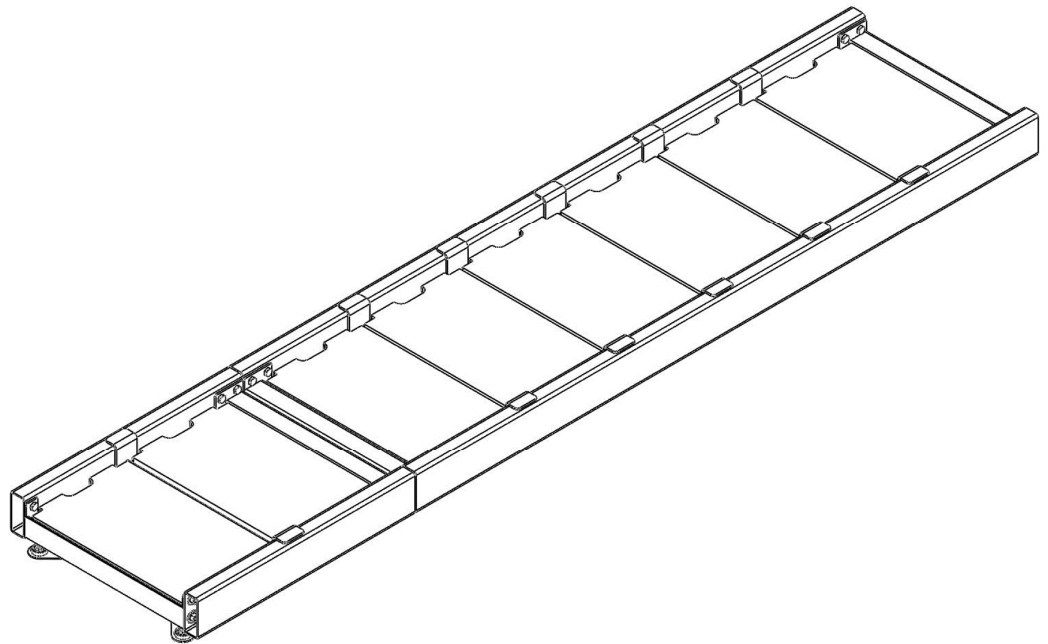
Step 5 - Inserting the Saddles and Slabs

Procedure

1. Place 5 Slab Saddle assemblies evenly on the main frame and 1 centrally on the Lead-on frame as shown.



2. Carefully place the Slabs into position between the saddle assemblies.



Panel Reader installation

The Panel Reader needs to be able to read the animal's Electronic ID, prior to the animal stepping off the Main platform, to ensure the Electronic ID and the weight are stored together in the Scale.

Panel Reader installation requirements

See the manufacturer's documentation for specific installation instructions.

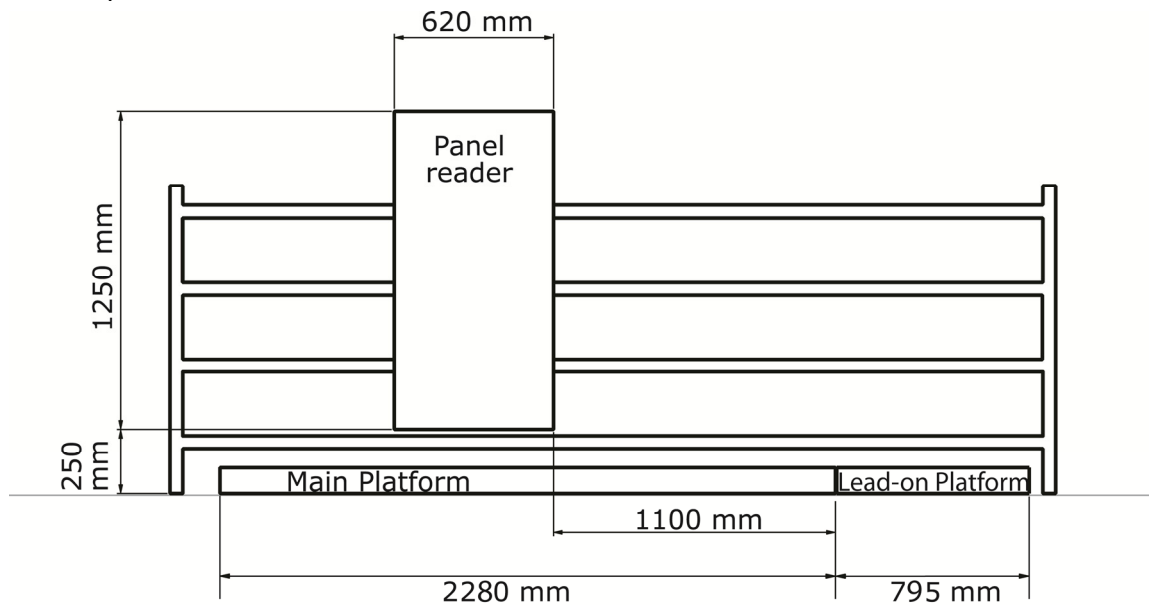
Mounting the Panel Reader

1. Mount the Panel Reader on the outside of the race with the leading edge of the Panel Reader approximately 1100 mm from the leading edge of the Main Weighing Platform and 250 mm above the ground.

Note: The mounting height of the Panel Reader may need to change depending on the size of animals. The taller the herd, the higher the Panel Reader needs to be mounted.

2. Run the power and data cable to the Scale location and temporarily terminate.

See the manufacturer's documentation for details on cable shielding requirements.

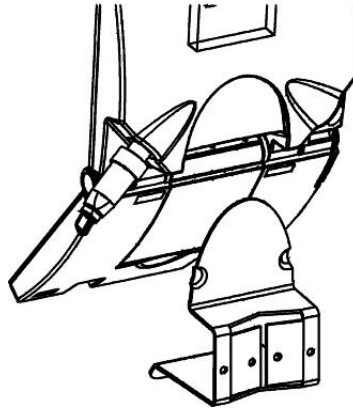


Panel Reader dimensions

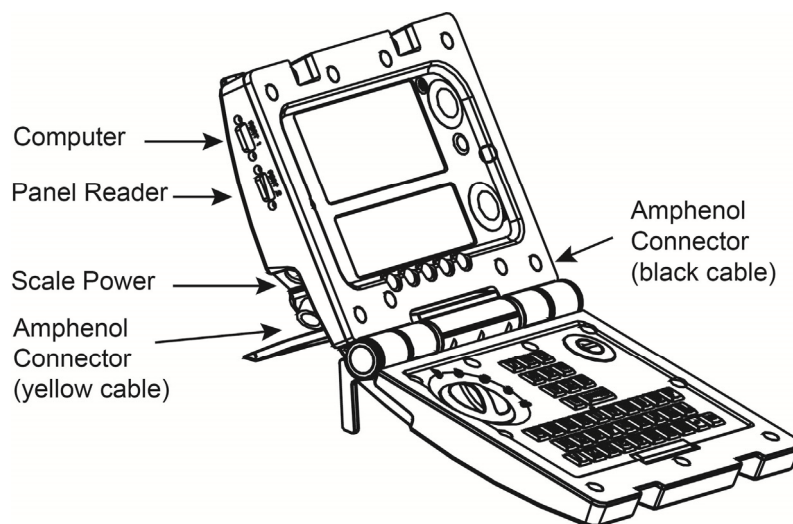
Scale head installation

Procedure

1. Release the catches on the front of the Scale head and open the case.



2. Slide the Scale head onto the Scale bracket.
3. Connect the Scale power supply cable.



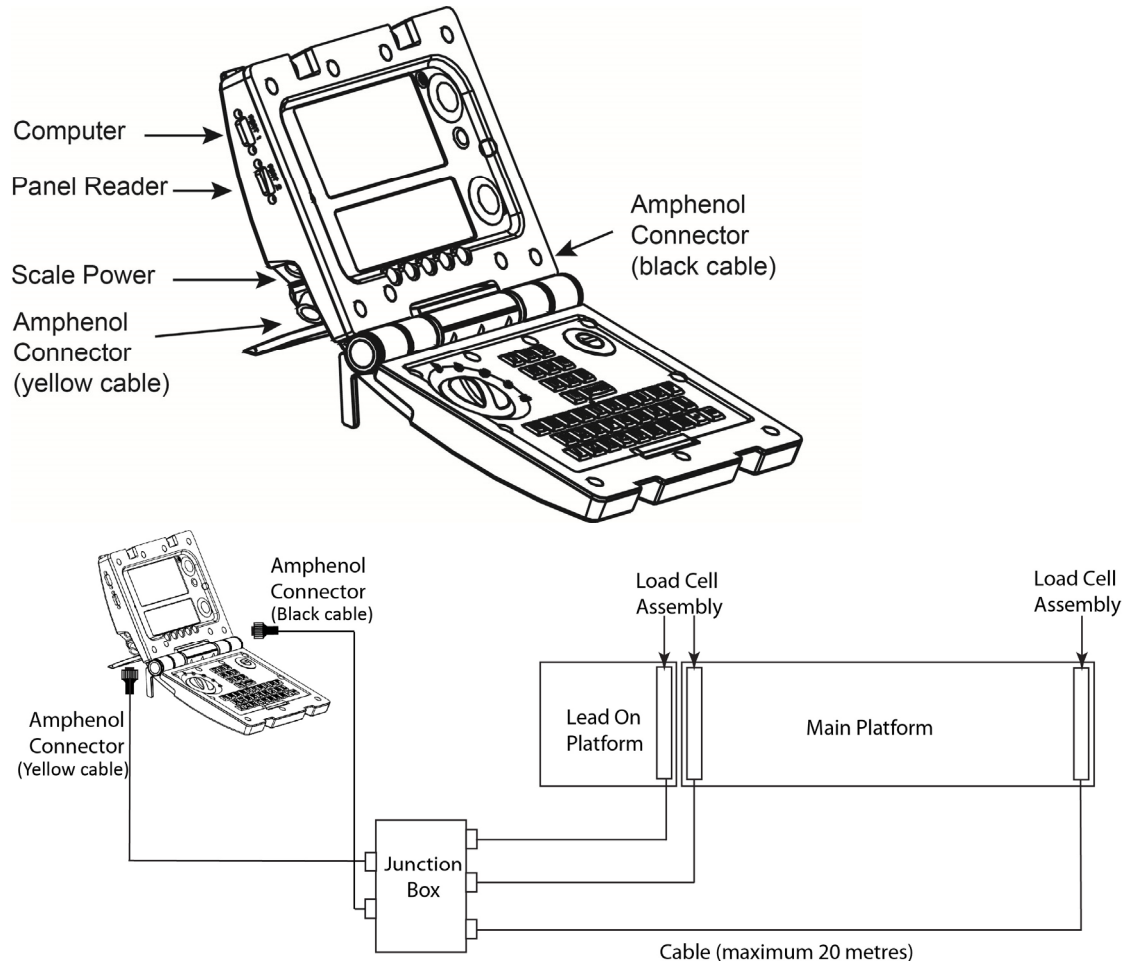
4. Set up the Scale as per the User manual. You need to set up the following:
 - Set the time and date in the Scale
 - Set the User Options
 - Assign the communications ports (The Panel Reader connects to COM 2)
 - Select your country of operation
 - Select milking start times
 - Enter herd names
 - Select herd milking orders.

CONNECTING CABLES TO THE SCALE

Once all required components are individually installed, you can connect the components to the Scale.

Procedure

1. Connect the Weighing Platform cables to the Scale.



- The Loadcell assemblies are connected to the Junction box using the 20m unterminated cables supplied, which are terminated in the Junction box. Follow the wiring diagram on the lid of the Junction box. Two short tails from the Junction box will plug into the Scale head.
- Mount the Scale head undercover in the Dairy shed, with the loadcell cables routed into the shed.

Note:

- The yellow Amphenol Connector is always on the left side of the indicator - and the black Amphenol connector is always on the right. (Which platform they connect to will depend on which indicator version you have)
- It is important to match the wire colours on the Amphenol cables with the writing on the interface PCB (2A0212LF-1). Note that the pin numbers on the Amphenol connector do not necessarily match the pin order on the PCB connector.

1. Connect the Panel Reader data cable into the COM 2 port on the Scale.
2. Connect the Scale power supply cable to the Scale.

Note: Warning messages are displayed on the Scale if the Weighing Platforms are plugged in incorrectly or are not plugged in.

The components then need to be individually tested. Refer to *Testing the DairyScale components* (p 17).

TESTING THE DAIRYSCALE COMPONENTS

Once all required components are installed you can test each component is functioning.

Checking that the Load cells are functioning

Use the following procedure to test that the Load cells are functioning correctly on both the Lead-on and Main Weighing Platforms.

Before you start

- Clear all debris from on and under the Weighing Platforms.
- Ensure the Weighing Platform cables are correctly connected to the Scale. Refer to *Connect cables to the Scale* (p 15).

Procedure

1. Access the **Change auto weighing** menu option. Refer to *Change auto weighing* (p 25).

AUTO WEIGHING CONFIGURATION	
Entry weight	319
Leading weight	34826
Trailing weight	34970
Main platform gain	1.265942
▼	EXIT

Note: The values shown above may vary depending on your installation.

2. Write down the values for the following fields:
 - Entry weight
 - Leading weight
 - Trailing weight
3. Stand on, or place a weight on, the **trailing** edge of the Lead-on platform and look at the **Auto Weighing Configuration** screen on the Scale.
4. Did the **Entry weight** value increase from the value you wrote down?
 - If yes, the Load cells on the Lead-on platform are functioning correctly.
 - If no, the Load cells on the Lead-on platform are malfunctioning. See below for details on identifying the problem.
5. Stand on, or place a weight on, the **leading** edge of the Main platform and look at the **Auto Weighing Configuration** screen on the Scale.
6. Did the **Leading weight** value increase from the value you wrote down?

- If yes, the leading edge Load cells on the Main platform are functioning correctly.
 - If no, the leading edge Load cells on the Main platform are malfunctioning. See below for details on identifying the problem.
7. Stand on, or place a weight on, the **trailing** edge of the Main platform and look at the **Auto Weighing Configuration** screen on the Scale.
 8. Did the **Trailing weight** value increase from the value you wrote down?
 - If yes, the trailing edge Load cells on the Main platform are functioning correctly.
 - If no, the trailing edge Load cells on the Main platform are malfunctioning. See below for details on identifying the problem.

Malfunctioning Load cells

If you have found malfunctioning Load cells check the following:

- Check wiring in Junction box.
- Clear all debris from on and under the Weighing Platforms.
- Ensure the Lead-on and Main platforms are not touching.
- Check all cables for damage.
- Check all Amphenol plugs are clean and correctly connected.

Then complete the procedure again.

Contact your supplier if you have continuing problems.

Calibrating the Scale head to the Weighing Platform

Each time you connect a new Scale to the Weighing Platform, it must be calibrated to ensure it weighs accurately.

Span Loadbars Menu	Description
Zero count	Starts at zero and increases to a value between 31700 and 33700.
Leading Load Bar count	This is the raw Analogue to Digital value from the Leading edge Load cell on the main platform. The value displayed depends on the test weight used to calibrate the Scale.
Trailing Load Bar count	This is the raw Analogue to Digital value from the Trailing edge Load cell on the main platform. The value displayed depends on the test weight used to calibrate the Scale.
Span weight	During the calibration process the Scale uses the above values to estimate the test weight. The estimated weight is displayed in this field. Correct the displayed weight as required to calibrate the Weighing Platform. Defaults to 200 kg.

Before you start

- Clear all debris from on and under the Weighing Platform set.
- Ensure the Weighing Platform cables are correctly connected. Refer to *Connect cables to the Scale* (p 15).
- Check that all Load cells are functioning. Refer to *Checking the load cells are functioning* (p 17).
- You have a known calibrated weight of a minimum of 200kg.

Procedure

1. Access the **Engineering Options** menu. Refer to *Accessing the Engineering Options menu* (p 24).
2. Select the **Change Span** option. The **Span Loadbars** menu displays.

SPAN LOADBARS

Zero count = 0
 Leading Load Bar Count = 0
 Trailing Load Bar Count = 0
 Span Weight = 200

DIGIT
1
OK

3. Ensure there is nothing on the Main Weighing Platform then press the blue **Zero** button to zero the Scale.

The **Zero count** option flashes until the appropriate number of samples are captured. A value is then displayed. This should take between 5 and 30 seconds.

Note: If not enough clean samples (noise free and stable) are captured the Scale can not be calibrated to the Weighing Platform. See *Fixing calibration problems* (p 21) for more details.

4. Place the known weight on the leading edge of the Main Weighing Platform.
5. Press the green **Weigh** button.

The **Leading Load Bar Count** option flashes until the appropriate number of samples are captured. A value is then displayed. This should take between 5 and 30 seconds.

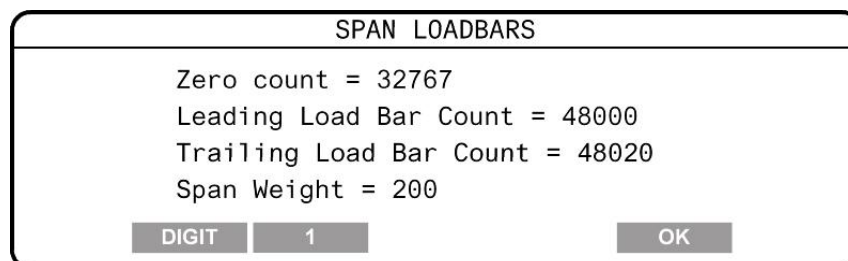
Note: If not enough clean samples (noise free and stable) are captured the Scale can not be calibrated to the Weighing Platform. See *Fixing calibration problems* (p 21) for more details.

6. Place the known weight on the trailing edge of the Main Weighing Platform.
7. Press the green **Weigh** button.

The **Trailing Load Bar Count** option flashes until the appropriate number of samples are captured. A value is then displayed. This should take between 5 and 30 seconds.

Note: If not enough clean samples (noise free and stable) are captured the Scale can not be calibrated to the Weighing Platform. See *Fixing calibration problems* (p 21) for more details.

The Scale then updates the **Span Weight** value with the weight it thinks is on the Main platform.



8. Check the **Span Weight** value.
9. Is the **Span Weight** value correct?
 - If yes, go to step 11.
 - If no, go to step 10.
10. Press the **DIGIT** soft key to change the digit position in the span weight value. The centre button changes the value of the selected digit.

Example:

Centre soft key	Digit for change in span weight value
1	125 <u>0</u>
10	12 <u>5</u> 0
100	1 <u>2</u> 50
1000	<u>1</u> 250

Press the centre soft key to correct the displayed **Span Weight** to the correct weight.

11. Once the correct weight is displayed, press the **OK** soft key to save and exit the **Span Loadbars** menu.
12. Press the **OK** soft key to exit the **Engineering Options** menu.

Note: To exit without saving the changes, turn the mode select switch to another option without pressing **OK**. The Scale reverts to normal operation without saving the changes.

Note: Once the calibration information is captured it is stored with the factory defaults. It is not lost if the factory defaults are restored

Fixing calibration problems

If there is too much electrical noise in the cable between the Weighing Platform and the Scale then the Scale will not receive enough clean samples. This will cause the calibration process to fail.

Check the following prior to contacting you supplier:

- Check all cables for damage.
- Check all Amphenol plugs and sockets are clean and correctly connected.
- Check for electrical noise / induction around the Weighing Platform and Scale.

Setting maximum and minimum weights

Refer to *Change auto weighing* (p 25) for details on the factory default settings for the maximum and minimum weights.

Procedure

1. Determine if you need to change the default maximum and minimum weights based on the animals you plan on weighing.
2. Do you want to change the maximum and minimum weights?
 - If yes, go to step 3.
 - If no, end of procedure.
3. Access the **Change auto weighing** menu. Refer to *Change auto weighing* (p 25).
4. Select the **Min weight allowed** option.

The **DIGIT** and **1** soft keys display.

Press the **DIGIT** button repeatedly, the label on the **1** button changes from 1 to 10, 100, to 1000, to 10000 and back to 1.

When the label is 1, each time you press the **1** button, you add 1 to the limit. When the label is 10000, each time you press the **10000** button, you add 10000 to the limit.

5. Increase the **Min weight allowed** value as required.

250 kg is the minimum weight allowed. You can increase this values if required.

6. Select the **Max weight allowed** option.

The **DIGIT** and **1** soft keys display.

Press the **DIGIT** button repeatedly, the label on the **1** button changes from 1 to 10, 100, to 1000, to 10000 and back to 1.

When the label is 1, each time you press the **1** button, you add 1 to the limit. When the label is 10000, each time you press the **10000** button, you add 10000 to the limit.

7. Change the **Max weight allowed** value as required.

If you have large animals you may need to increase the max weight allowed to approximately 950 kg.

8. Press **EXIT** to save the changes and return to the **Engineering Options** menu.

Testing the Scale

Once the Scale has been calibrated, you need to test the Scale to confirm it is weighing correctly.

Procedure

1. Remove all objects from on the Main platform.
2. Turn the mode select switch to **M**.
3. Check that the **ZERO** icon is displayed.

If it is not displayed press the blue **Zero** button to zero off any weight (dirt or manure) left on the platform.

4. Place the calibrated weight in the middle of the Main platform.

The Scale displays the weight of the object.

5. If the displayed weight correct?
 - If yes, the Scale is correctly calibrated.
 - If no, the Scale is not correctly calibrated. Re-calibrate the Scale. Refer to Calibrating the Scale to the Weighing Platform.

Testing the Panel Reader

See the manufacturer's documentation for details on tuning the Panel Reader for optimal performance.

Test with Electronic IDs and determine that the read range is acceptable for the herd.

DAIRYSCALE ENGINEERING OPTIONS MENU

The Engineering menu lets you change various options on the Scale.




The following options are available in the Engineering menu:

- Change auto weighing
- Change span
- Change resolution
- Restore set up

Accessing the DairyScale Engineering Options menu

The **Engineering Options** menu is a hidden menu which enables you to change settings used to configure the Scale.

Procedure



1. Turn the mode select switch to **S**.
2. Press the  and  soft keys , as required, to select **USER OPTIONS**.
3. Press the  soft key.
4. Once the **USER OPTIONS** view displays on the lower screen, press buttons in the following sequence.

Green → red → blue → blue → red → right hand soft key.

The **ENGINEERING OPTIONS** menu displays in the lower screen.

5. Select the **Change auto weighing** option.

The **AUTO WEIGHING CONFIGURATION** menu displays in the lower screen.

AUTO WEIGHING CONFIGURATION	
Entry weight	319
Leading weight	34826
Trailing weight	34970
Main platform gain	1.265942
	

Note: The values shown above may vary depending on your installation.

Change auto weighing

This menu enables you to change the settings used in auto weighing.

Change Auto Weighing menu	Description
Lead-on weight	<p>This is the raw Analogue to Digital value from the Lead-on platform Load cell. The data displayed updates every second and increases as weight is applied on the Load cells.</p> <p>In normal operations with no weight on the platform, the displayed value should be between 170 and 370.</p> <p>Note: The raw data displayed in this field is non-linear due to the Lead-on platform pivot action.</p>
Leading weight	<p>This is the raw Analogue to Digital value from the leading edge Load cells on the Main platform. The data displayed updates every second and increases as weight is applied on the Load cells.</p> <p>In normal operation with no weight on the platform, the displayed value should be between 31700 and 32700.</p>
Trailing weight	<p>This is the raw Analogue to Digital value from the trailing edge Load cells on the Main platform. The data displayed updates every second and increases as weight is applied on the Load cells.</p> <p>In normal operations with no weight on the platform, the displayed value should be between 31700 and 32700.</p>
Main platform gain	Used when capturing raw samples to the computer.
Min weight allowed	<p>250 kg (minimum)</p> <p>Weights captured below this will be rejected and not stored.</p>
Max weight allowed	<p>7500 kg (default)</p> <p>Weights captured above this will be rejected and not stored.</p>

Procedure

1. Access the Engineering menu. Refer to *Accessing the Engineering Options menu* (p 24).
2. Select the **Change auto weighing** option. The **Auto Weighing Configuration** screen displays.

Change resolution

Important: Use this option only under instruction from Gallagher or your supplier.

To change the **static weight limits** and steps for the Main Weighing Platform while in Manual mode complete the following steps:

Note: The Weighing Platform does not need to be connected while you set the resolution limits and steps.

Procedure

1. Access the **Engineering Options** menu. See *Accessing the Engineering Options menu* (p 24).
2. Select the **Change resolution** option.
3. Press the **SELECT** soft key.

The **DISPLAY RESOLUTION** screen displays in the lower screen.

DISPLAY RESOLUTION		
	Limit	Step
MANUAL 1	50	0.2
MANUAL 2	200	0.5
MANUAL 3	500	1
MANUAL 4	2000	2
<div style="display: flex; justify-content: space-between; align-items: center;"> DIGIT 1 NEXT </div>		

4. Press the **NEXT** soft key until the value you want to alter is highlighted.
5. Alter the Limit or Step values as follows:

– Limit value


Note: After you select a Limit value, the labelling of the three buttons along the bottom of the screen changes to **DIGIT**, **1** and **NEXT**.

Use the **DIGIT** and **1** buttons to set a limit number.

- The largest limit number you can input is 99999.
- When you press the **DIGIT** button repeatedly, the label on the **1** button changes from 1 to 10, 100, to 1000, to 10000 and back to 1.
- When the label is 1, each time you press the **1** button, you add 1 to the limit. When the label is 10000, each time you press the **10000** button, you add 10000 to the limit.

– Step value




Note: After you select a Step value, the labelling of the three buttons along the bottom of the screen changes to **▼**, **▲** and **NEXT**.

Use the  and  buttons to change the step value.

- You can set the step value to any of 0.1, 0.2, 0.5, 1, 2, 5, 10, 20, 50 or 100.

6. To save the changes, follow these steps.

- Navigate to the end of the resolution list.

The labelling of the three buttons along the bottom of the screen changes to ,  and .

- Press the  button.

Note: To discard the changes, turn the mode select switch to any other position.

Restore set up

Factory calibration values are stored in a separate location in memory. Should the values be lost or corrupted in working memory, they can be recovered from the backup location through this menu option.

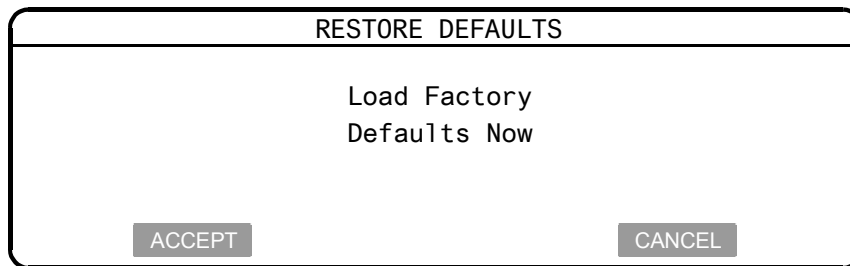
Note: The following information is stored with the factory defaults and is not lost when the factory defaults are restored:

- Calibration information
- Scale Model

To restore the factory defaults, complete the following steps:

1. Access the Engineering menu. See *Accessing the Engineering Options menu* (p 24).
2. Select the **Restore set up** menu.
3. Press the **SELECT** soft key.

The **RESTORE DEFAULTS** screen displays in the lower screen.

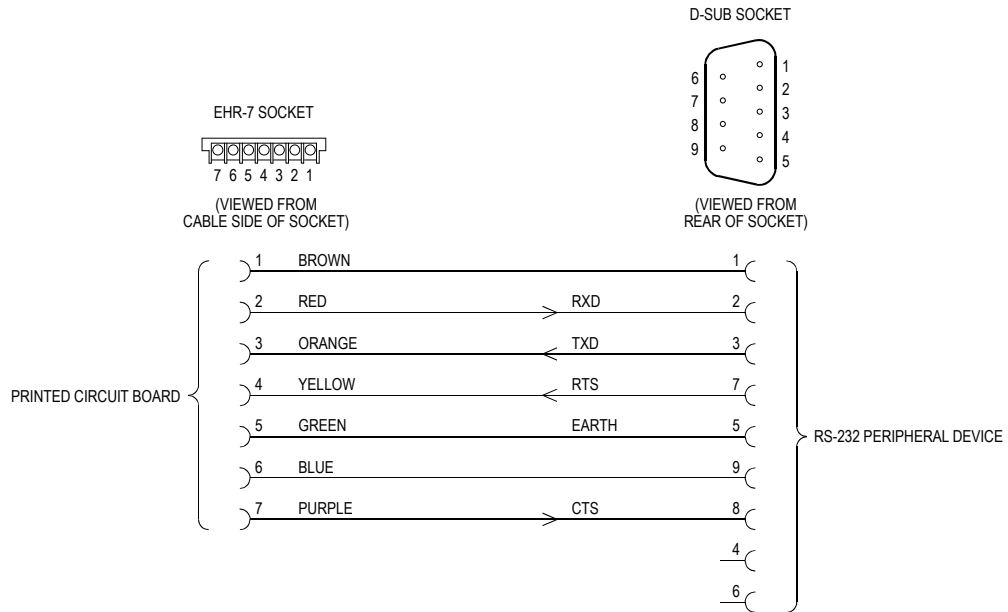


4. Do you want to restore the factory defaults?
 - If yes, press the **ACCEPT** soft key.
 - If no, press the **CANCEL** soft key.

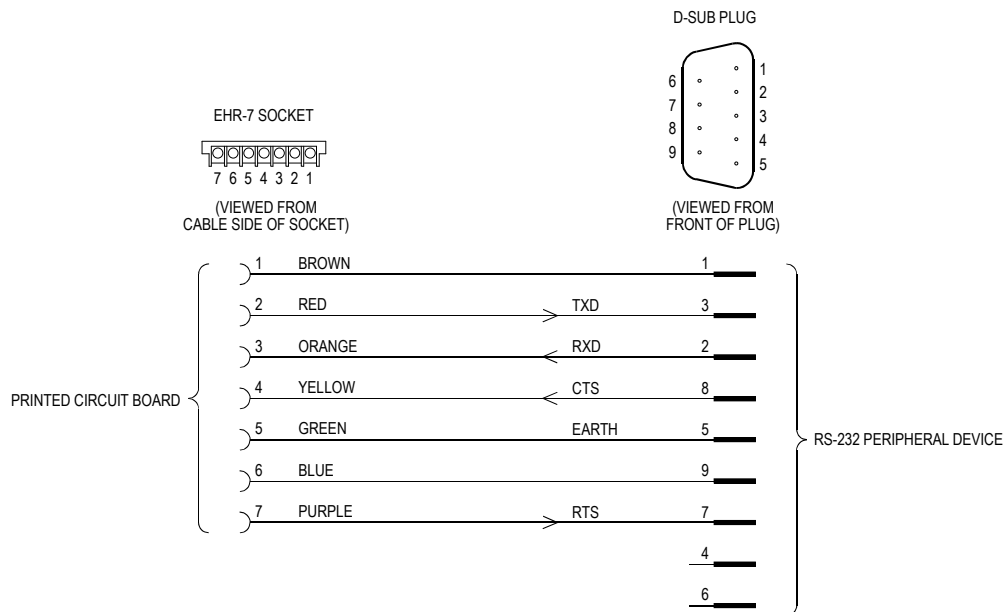
CONNECTOR WIRING

RS-232 port connectors

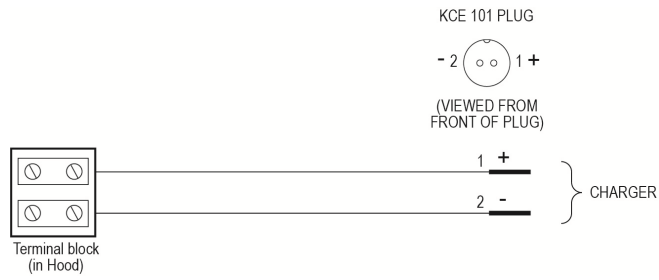
Top 9-pin Female DB9



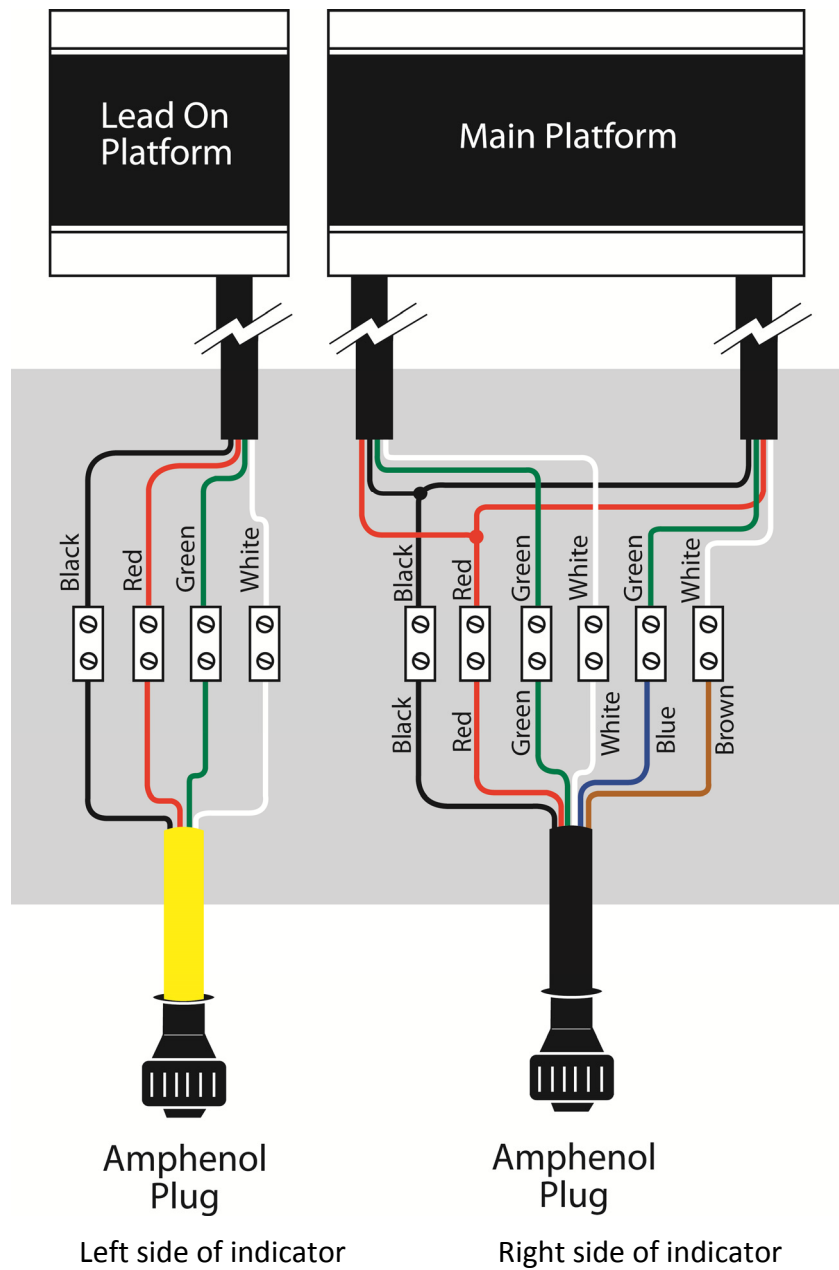
Bottom 9-pin Male DB9



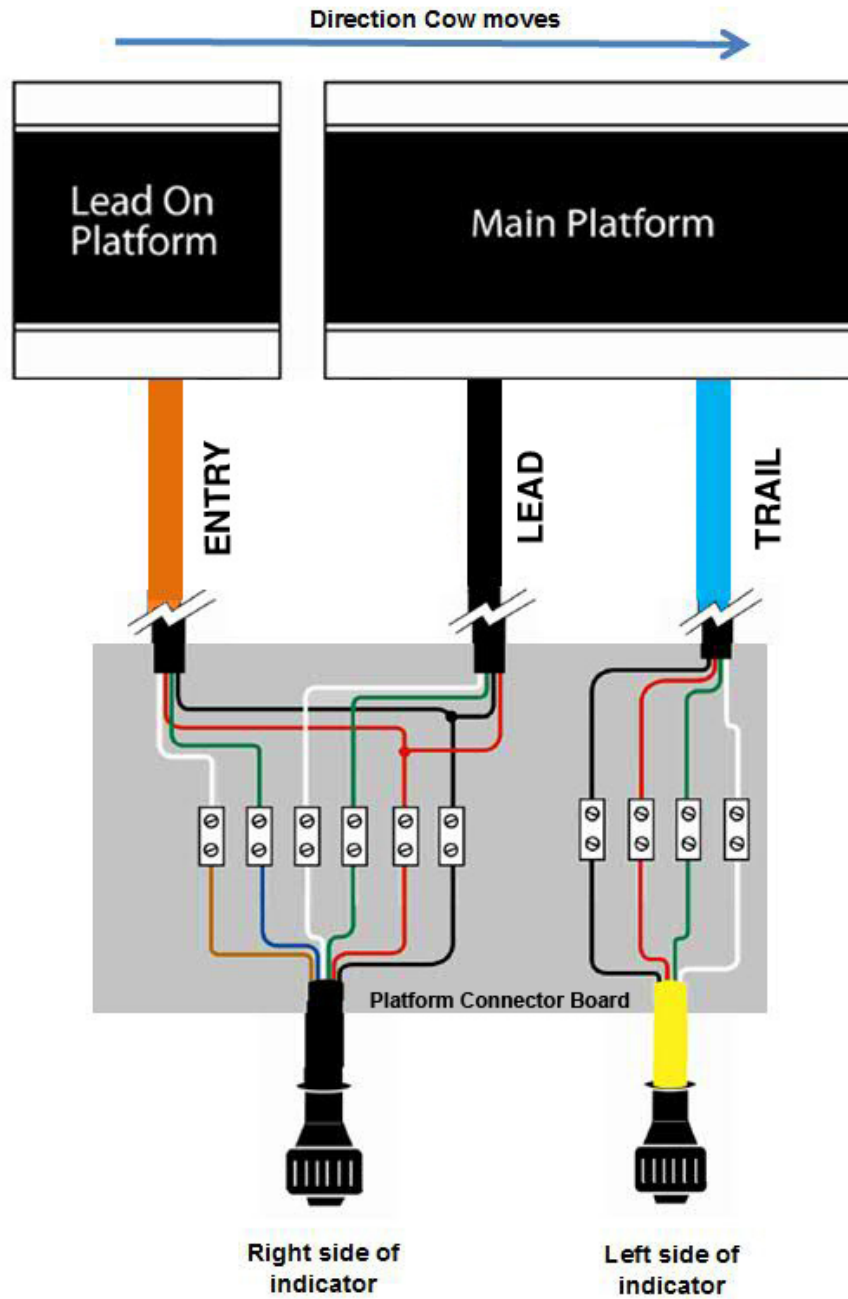
Scale power supply

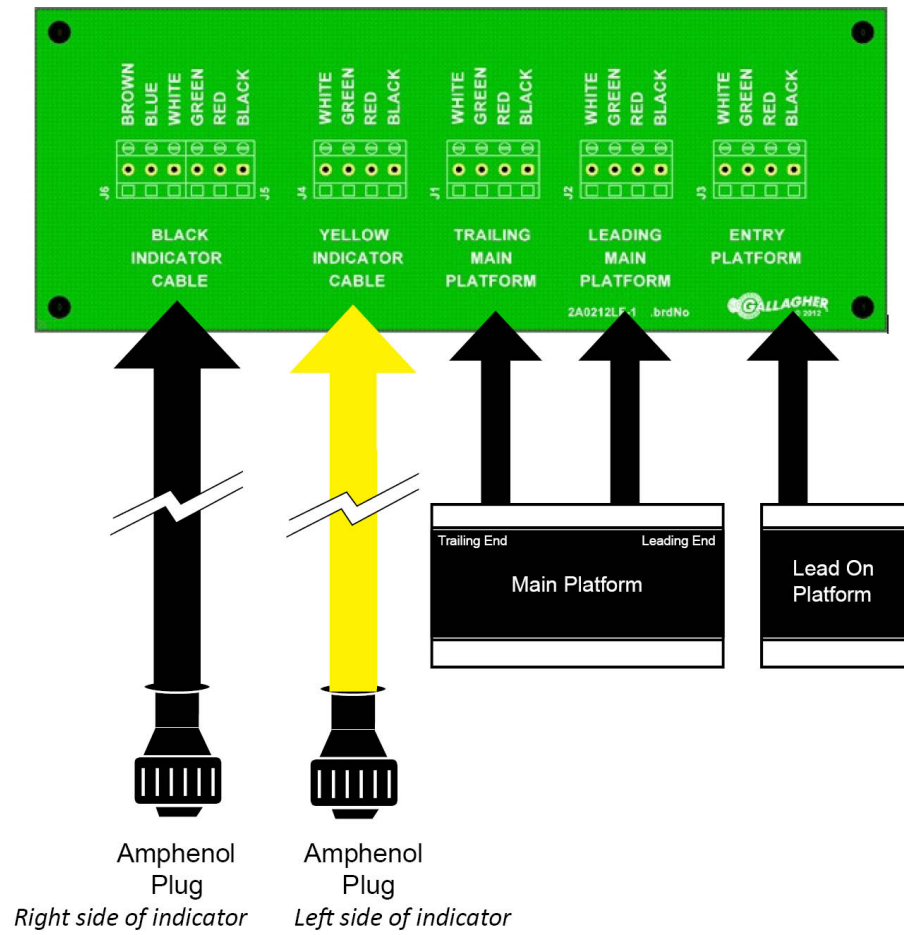


Weighing Platform connectors before December 2013



Weighing Platform connectors from December 2013





SPECIFICATIONS

Dimensions

Scale head Dimensions

Length	232 mm	9¼ inches
Width	212 mm	8½ inches
Height	90 mm	3½ inches
Approximate weight	2 kg	4.4 pounds

Weighing Platform dimensions

	Width	Length	Deck Height
Lead-on platform	686 mm	795 mm	111.5mm
Main platform	686 mm	2280 mm	111.5mm

Power supply specification

Model

Peak	7 Amps
Output	13.8 V DC

Power Supply Cable specification

In order to correctly determine the cable requirements, use the following procedure.

Output Voltage	12 V
Current	4 Amps
Max voltage drop	0.5 V
Minimum cable resistance	0.125 Ohms

Procedure

To calculate the required cable resistance per metre use the following:

1. Determine the exact distance from the Power supply to the Scale in metres.
2. Determine the allowable resistance per metre using the following equation:

$$\text{Resistance per metre} = \frac{0.125 \text{ ohms}}{\text{Distance from Power Supply to Scale in metres}}$$

3. Take the following information to your cable supplier and get a cable that meets the requirements.
 - Distance from the Power supply to the Scale in metres, and
 - Resistance per metre as per the previous calculation.

Note: The cable used must have a resistance per metre of **less than** the calculated value.

Scale power requirements

Voltage	12 V
Approximate consumption (without platform set)	65 mA
Approximate consumption (with platform set)	115 mA

General

Temperature	-20 to 50°C (5 to 105°F)
Accuracy (Static weighing only)	±1%
Environmental protection rating	IP67

Scale Parts list

Weighscale

Scale crossmember complete assembly	3
Scale Lead on crossmember	1
Scale slab saddle assembly	6
Scale mounting plate assembly	4
Scale Lead on rail RHS	1
Scale Lead on rail LHS	1
Scale main rail	2
Weigh scale slab	8
Scale fastening kit	1
Scale Junction box assembly	1
Scale XDS5000 plus package	1
Weigh scale assembly instructions	1

Scale fastening kit

Weighscale adjuster boss	6
Weigh scale foot	8
Nut half M14 S/S	8
Hex Bolt & Nut M12x25 Galv	22
Washer Heavy M12x28 Galv	22
Washer Spring M12 Galv	22
Excalibur Screw M10x60 Hes S/S	8

DATE OF MANUFACTURE AND SERIAL NUMBER

Scale date of manufacture and serial number

The label detailing the date of manufacture and the serial number is on the inside of the fold-out support stand.

