WEIGH SCALE AND DATA RECORDER
W810 v2

Weigh Scale and Data Recorder W810 v2 User Manual

3E2364 - Edition 5 – September 2014

Table of Contents

INTRODUCTION

Thank you for purchasing the Gallagher Weigh Scale W810 v2.

Gallagher has been making agricultural weighing equipment for over 60 years. In that time we have earned a reputation for the manufacture of quality equipment that is simple, tough, innovative and reliable.

The Weigh Scale range of Weigh Scales is specifically designed to accurately weigh live animals.   However the Gallagher range is also well suited to weighing static loads and can be used for this purpose in industrial applications.

As well as weighing, Weigh Scale W810 v2 includes the following features;

- You can type animal management information in plain text using the QWERTY keyboard.
- You can identify animals using Electronic IDs and/or Visual Tag Numbers.
- You can record a condition score or note for each animal, or up to eight animal traits.
- You can use graphs as an aid to analysing changes in animal weight over time.
- You can draft up to 9 ways either by weight or from a list.
- You can view session statistics, analysed by draft group for the current session.
- You can view statistics for closed sessions.
- You can store up to 10 Trait tables in the Weigh Scale and select the required table when creating a new session.
- You can edit the Visual Tag Number in the current session.
- You can edit the trait data on animals in the current session.
- You can store drafting limits with the session.   These drafting limits are sent back to APS with the session.
- You can store a session note with a session.   This is sent back to APS with the session.

CARE AND MAINTENANCE

The Weigh Scale W810 v2 is a tough and reliable product designed for use in typical livestock environments. However, proper care and maintenance can extend its life.

Listed below are guidelines for keeping the Weigh Scale in good condition:

- Don't submerge the Weigh Scale in any liquid.
- Store the Weigh Scale in a cool, dry place. Avoid storing it in direct sunlight
- After use, clean the Weigh Scale with a damp cloth.   Take care not to scratch the display.
- Fit the connector caps to keep the connections clean and dry.

First-time use

When you open the Weigh Scale the first time, you will find that the display screen is covered with a transparent overlay.   The overlay is printed with the number 630 and other characters.
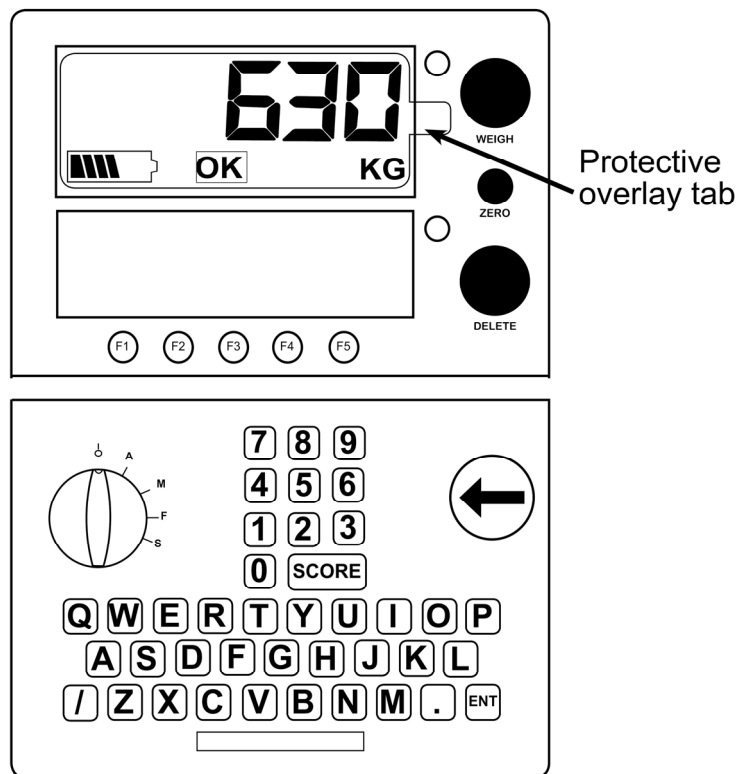
Remove this overlay before starting to use the Weigh Scale.   The overlay is easily removed after first grasping the tab.

INSTALLATION

Installing the Weigh Scale bracket

The bracket can be mounted on a flat vertical surface, or on a round post.

To mount the bracket on a flat vertical surface, for example a square post or board, use the outer holes.

Mounting holes for flat board
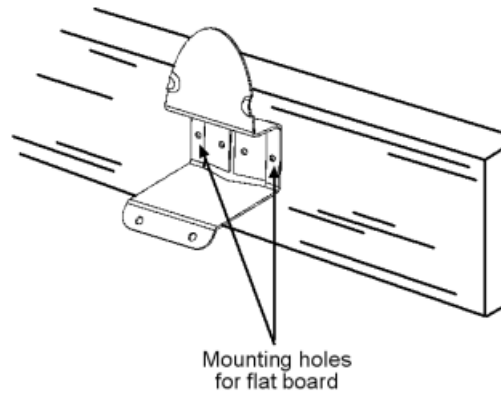
To mount the bracket on a round post, use the inner holes.

Mounting holes for round post
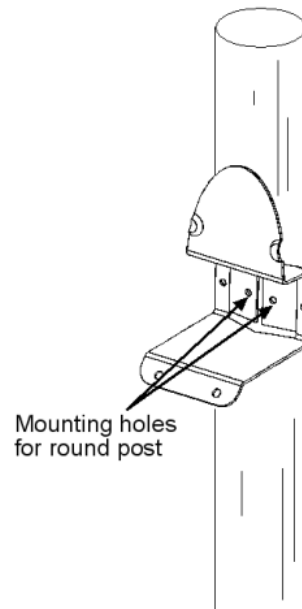
Don't mount the Weigh Scale bracket on the weighing crate or chute.

Installing the loadbars

To install the loadbars, follow these steps:

Note: Fit the loadbars as per the manufacturer's instructions.

1. Bolt the platform to the loadbars.
2. Ensure the platform is placed on a flat and level surface. Make sure it is not touching any rails or gates.
3. Either bolt the loadbars to the concrete pad or locate them on studs set into the concrete. This will prevent the platform from moving during the weighing session.
4. Connect the loadbar cables to the Weigh Scale.

Note: If you are using non Gallagher, loadbars ensure the loadbars are correctly calibrated.

Installing the Weigh Scale

The Weigh Scale can be placed on a table top or mounted on the Weigh Scale bracket supplied.

Position the Weigh Scale:

- clear of the platform to ensure it does not interfere with the flow of animals during the weighing cycle
- within easy reach of the loadbar leads
- within easy reach of the operator (for manual weighing), and
- in a well-lit area

POWER AND BATTERIES

During a weighing session, the Weigh Scale can be powered by its internal battery alone or by its internal battery and either the battery charger or an external 12 volt battery.

The battery charger connects between an AC outlet and the Weigh Scale.

If either the battery charger or an external 12 volt battery is connected to the Weigh Scale, the Weigh Scale's internal battery will be charged while the Weigh Scale is in use.

For optimum performance, switch off the Weigh Scale and charge its internal battery overnight.   When fully charged, the internal battery on its own will power the Weigh Scale continuously for a minimum of eight hours.

Battery life may be reduced if the Weigh Scale is being used to power an Electronic ID reader.

Charging the battery

The battery in the Weigh Scale can be recharged using either a battery charger or an external 12 volt battery.

Recharging the battery will take up to sixteen hours depending on the level of charge already in the battery. The Weigh Scale can be in use or can be switched off while the battery is being charged.

Using the battery charger

To charge the battery using the battery charger, follow these steps:

1.   Connect the lead between the battery charger and the Weigh Scale.

Battery Charger
Connector
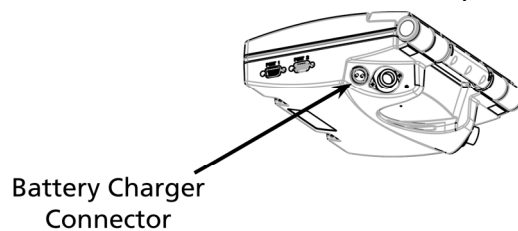
2.   Plug the battery charger into an AC outlet and switch on.

3.   Open the Weigh Scale case and make sure the battery charge icon on the main screen is flashing. This indicates that the battery is charging and will be displayed whether the Weigh Scale is turned on or off.

Using an external 12 volt battery

To charge the Weigh Scale's internal battery using an external 12 volt battery, follow these steps:

1. Connect the supplied black and red battery leads to the Weigh Scale.
2. Connect the other end of the battery leads to the 12 volt battery.
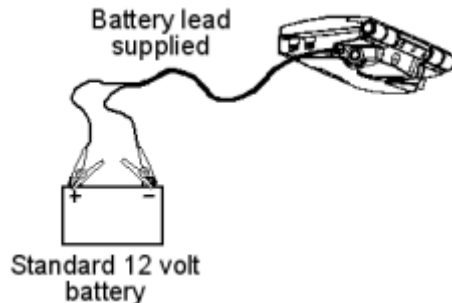
Connect the **Red** clip to the **Positive** terminal.

Connect the **Black** clip to the **Negative** terminal.

3. Open the Weigh Scale case and make sure the battery charge icon on the main screen is flashing. This indicates that the battery is charging and will be displayed whether the Weigh Scale is turned on or off.

Battery charge status

The battery icon displays in the bottom left corner of the Weigh Scale's upper screen.

It is important to note that the battery icon will only ever show the actual amount of charge left in the battery when the Weigh Scale is turned on and disconnected from external power.

Fully Charged		Battery Icon bars are all displayed constantly.
Partially Charged		Battery Icon shows first four bars constantly.
Battery Flat		No Battery Icon bars are displayed.

When the Weigh Scale is connected to the external power supply the battery icon will display the charging status.

Charging		Battery Icon shows all the bars constantly filling and then disappearing.

Low battery warning

When the charge remaining in the battery drops to a very low level, the battery charge icon on the Weigh Scale will start to flash and four beeps will sound every 30 seconds.   After about 15 minutes, the Weigh Scale will shut down.

Low voltage shutdown

When the battery charge drops to a critical level, the Weigh Scale will shut down. At this stage it is necessary to recharge the battery.

Battery voltage warning

If the voltage supplied from the charger to the Weigh Scale is not within the required range (10.5V - 15V) or the battery temperature rises above 50° C the Weigh Scale will beep and the battery charge icon will start to flash. It is important that you remove the charger from the Weigh Scale immediately.

Battery conditioning

When the Weigh Scale detects the battery voltage is very low, it will perform a battery conditioning charge process. This process will protect the battery by limiting the amount of current that is used to recharge the battery cells. Due to the current limitation, the charge cycle will take 16 hours to complete. By performing a full conditioning charge, the life of the battery will be greatly extended.

The Weigh Scale can be used while the battery conditioning is in progress. The remaining charge time will be displayed on the lower screen when the Weigh Scale is switched off.

Note: If the charge cycle is interrupted, theWeigh Scale will attempt a conditioning cycle the next time it is plugged into a charger.

THE WEIGH SCALE'S CONTROLS

Upper screen →

Red weight "OK" light

Green weigh button

WEIGH

Blue zero button

ZERO

Lower screen →

Red delete button

DELETE

Soft keys

F1 F2 F3 F4 F5

Bluetooth paired light

Mode select switch →

7 8 9
4 5 6
1 2 3
0 SCORE

Backspace button

Numeric keypads

Q W E R T Y U I O P
A S D F G H J K L
/ Z X C V B N M . ENT

Alphabetic keypads
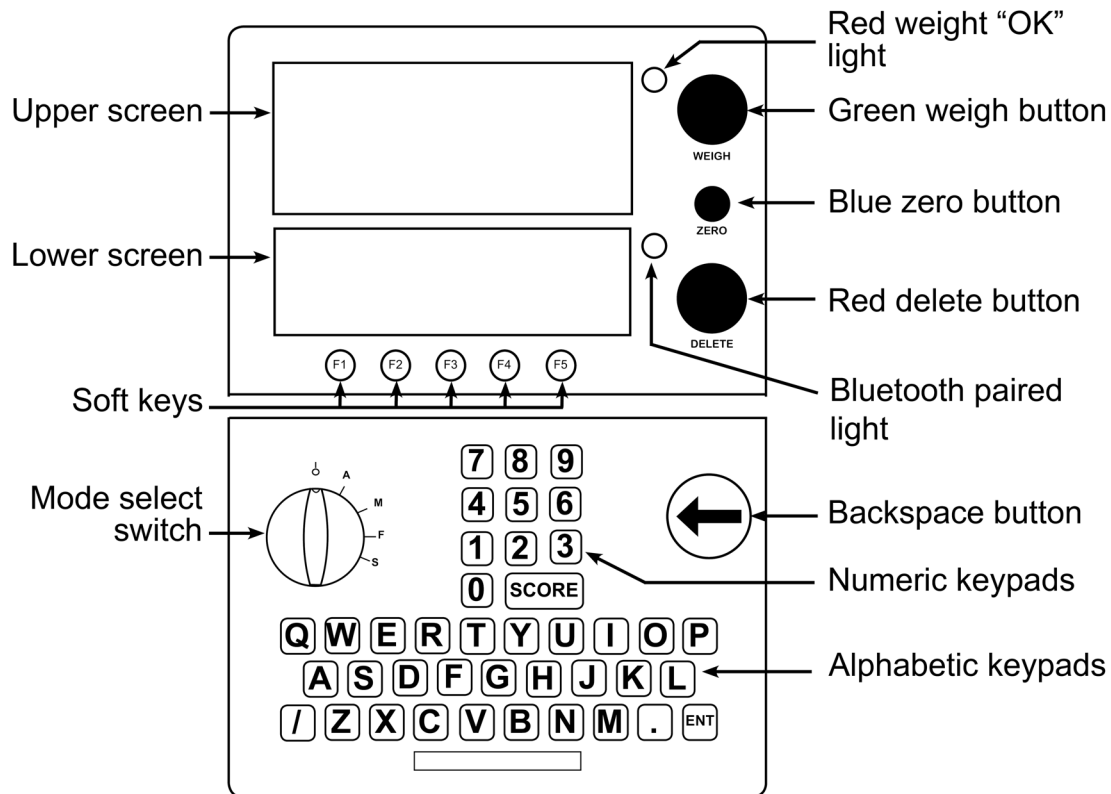
Soft Keys

Five soft keys are arranged along the bottom of the lower screen.   The function of these soft keys changes depending on what the lower screen displays.   For any given screen, not all soft keys have a function.   Those that do are labelled in the screen.

Lower screen →

( )	TAG	WEIGHT	CON	NOTES
	125	302	7	VACCINATE
	138	287	9	
	149	312	9	

▼ ▲ PREFIX NEW SCREEN

Soft keys
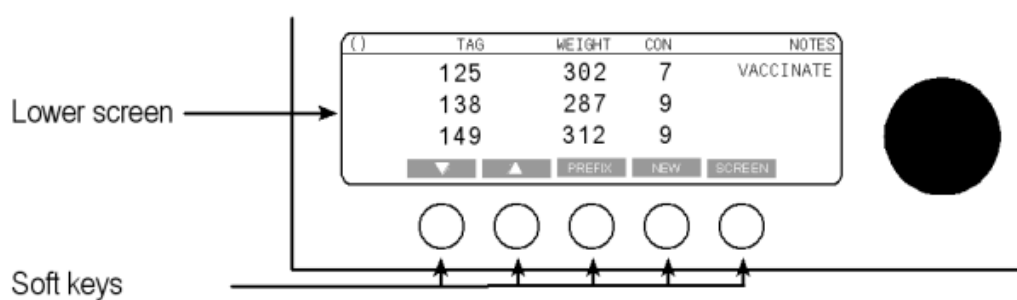
- Buttons like ▲ , ▼ and ▲▼ allow movement vertically up and down the screen.
- Buttons like ◄ and ► allow movement horizontally across the screen.
- The function of other buttons is described elsewhere in this user manual.

The mode select switch

The Weigh Scale can operate in three weighing modes and a setup mode.
The mode select switch is located on the left hand side of the Weigh Scale.
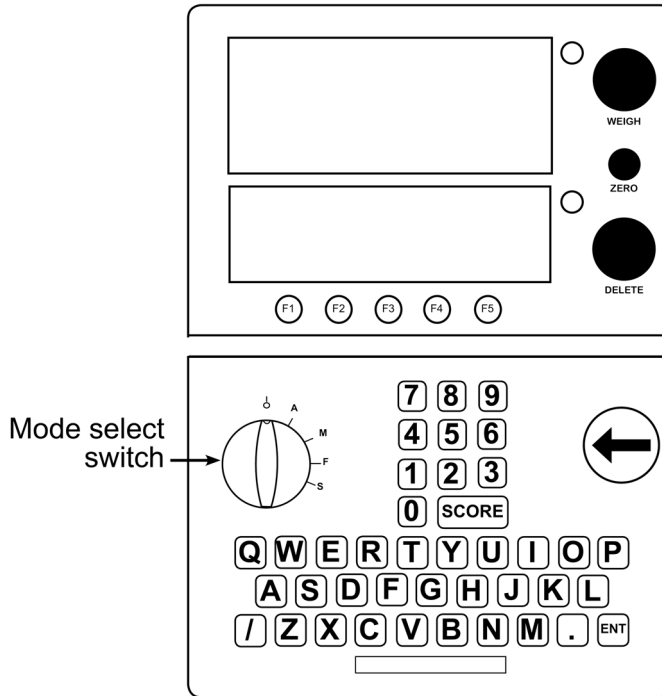
The mode select switch has five positions: ⏻ , **A**, **M**, **F** and **S**.   Immediately after you turn the switch to any position except ⏻, explanatory information will display on the lower of the two Weigh Scale screens.   The explanatory information will display only for a few seconds; after it disappears, the screen displays information relevant to the selected option.

⏻	This position turns the Weigh Scale off.
A	This position selects weighing in Automatic mode.
	You can also store Electronic IDs and update the Weigh Scale's cross-reference table when there are no loadbars connected.
M	This position selects weighing in Manual mode. You can also record animal information, without weighing, when there are no loadbars connected.
F	This position selects weighing in Fine mode. It is designed for static-load weighing. .
S	This position accesses the setup options.

SETUP

To access the Setup menu, turn the mode select switch to **S**.

The setup menu displays on the lower of the two screens on the Weigh Scale. In setup mode, the main screen normally displays the time in 24 hour format. Every minute the main screen momentarily displays the date, then automatically reverts to displaying the time again.

Date/time display

Battery charge indicator

Setup screen

Selection buttons

Mode select switch set to S

Weight "OK" light

Weigh button

Zero button

Delete button

Bluetooth paired light

Backspace button

Alphanumeric keypads
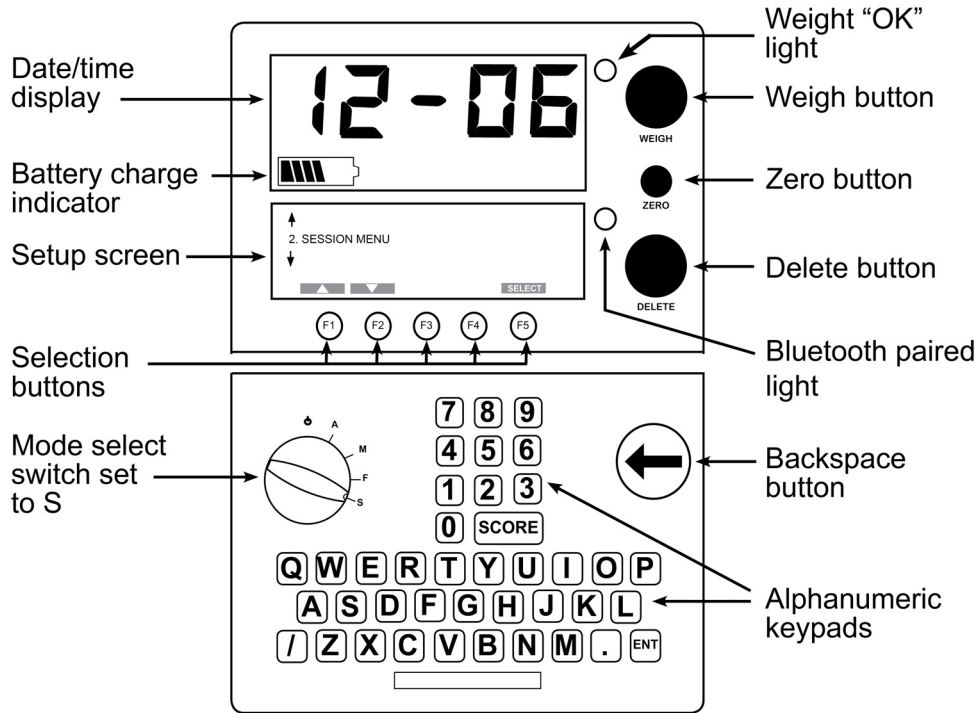
The setup menu contains six options:

1. DRAFT MENU - select the drafting mode and specify the drafting limit(s).
2. SESSION MENU - select a session and view, print or delete the session.
3. SET TIME AND DATE - set the current time and date.
4. USER OPTIONS - select weight units, turn Visual Tag Number checking on or off, turn live printing on or off, turn ADG display on or off.
5. COMMUNICATIONS - set up a connection to a computer, printer, Electronic ID reader or other external device and enable drafting via the auto Drafter.
6. SELECT COUNTRY - for a specific country, selects a language and country-specific terminology and weight unit.

Selecting a setup option

When you turn the mode select switch to **S**, one of the setup menu options is displayed.

```
                         SET UP
    ┌────────────────────────────────────────────────┐
    │                                                │
    │    ↑                                           │
    │    2. SESSION MENU                             │
    │    ↓                                           │
    │                                                │
    │  [  ▼  ] [  ▲  ] [DISPLAY]          [SELECT]  │
    └────────────────────────────────────────────────┘
```
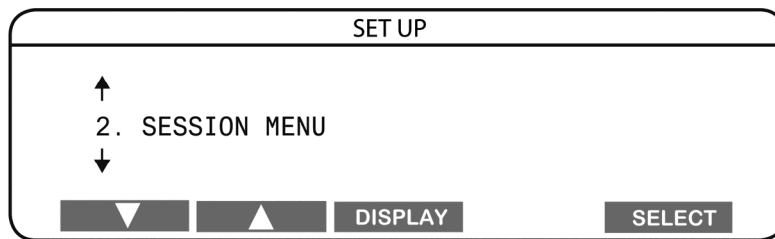
To select an option from the Setup menu:

1. Press the   [▲] or [▼]   soft key to display the required menu option.

2. Press [SELECT].

Alternatively, using the keypad, you can press the number of the menu item that you want to select.

For example:

- to select the Session Menu, press **2**,

- to select Communications, press **5**.

To change the screen contrast:

The contrast on the screen may need to be made lighter or darker for ease of viewing.

1. Press [DISPLAY] once.

2. Follow the on-screen instructions to alter the contrast.

3. Press [DISPLAY] again to change the backlighting. See *Backlighting* (p 12) for further details.

4. Press [DISPLAY] a third time to return to the Setup menu.

For more information about each of the setup menu items, refer to:

- *Draft Menu* (p 14)

- *Session Menu* (p 17)

- *Set the Time and Date* (p 23)

- *User Options* (p 24)

- *Communications* (p 28)

- *Select Country* (p 33)

Backlighting

The default setting for this option is OFF. When backlighting is turned on, both the upper and lower LCD screens are backlit for added visibility.

Using backlighting:

1. From a Setup menu option, press `DISPLAY` twice.

2. Press `OPTION` repeatedly to scroll through the list until you find the backlight option you require.

3. Press `DISPLAY` again to return to the Setup menu.

The options for backlighting are as follows:

Options	Description
DISPLAY BACKLIGHT To change the backlight of the screen Press GREEN key for darker Press RED key for lighter Current Setting: Off `DISPLAY` `TIMER`	Backlighting is switched off.
DISPLAY BACKLIGHT To change the backlight of the screen Press GREEN key for darker Press RED key for lighter Current Setting: 50% - On for 30 seconds `DISPLAY` `TIMER`	The backlighting will automatically turn off after 30 seconds of inactivity. The backlight will switch back on in the event of further activity.
DISPLAY BACKLIGHT To change the backlight of the screen Press GREEN key for darker Press RED key for lighter Current Setting: 50% - On for 60 seconds `DISPLAY` `TIMER`	The backlighting will automatically turn off after 1 minute of inactivity. The backlight will switch back on in the event of further activity.
DISPLAY BACKLIGHT To change the backlight of the screen Press GREEN key for darker Press RED key for lighter Current Setting: 50% - On for 120 seconds `DISPLAY` `TIMER`	The backlighting will automatically turn off after 2 minutes of inactivity. The backlight will switch back on in the event of further activity.
DISPLAY BACKLIGHT To change the backlight of the screen Press GREEN key for darker Press RED key for lighter Current Setting: 50% - On for 300 seconds `DISPLAY` `TIMER`	The backlighting will automatically turn off after 5 minutes of inactivity. The backlight will switch back on in the event of further activity.
DISPLAY BACKLIGHT To change the backlight of the screen Press GREEN key for darker Press RED key for lighter Current Setting: 50% - Always On `DISPLAY` `TIMER`	If the backlight option is switched to **Always On**, and the Weigh Scale is using an external power supply, the back-lighting will stay on until; • the Weigh Scale is switched off, or • the backlight option is changed to OFF, or • the Weigh Scale changes to battery power, followed by 5 minutes of inactivity.

Note: User activity is determined as:

- User input on keyboard, pushbuttons or rotary dial
- Any Electronic ID data received from RS232 or Bluetooth ports
- A weight change greater than 5kg or 11lb.

Draft menu

The Draft menu lets you set:

- the drafting mode,
- the drafting limits,
- the drafting gate number (if you have set up auto drafting), and
- a drafting gate for when draft limits are turned off.

Drafting can be completed:

- Manually
  For manual drafting the Weigh Scale displays the appropriate drafting gate to open.

- Automatically
  Using an autodrafter.

About drafters

A drafter uses the weight of the animal or a Draft list (requiring EID tags on animals) on the Weigh Scale to determine which draft gate to open for the animal. For manual drafting the Weigh Scale displays the appropriate draft gate. For autodrafting the Scale sends the drafting gate number to the drafter controller which opens the correct gate or gates.

Depending on the drafter used the Weigh Scale can control up to 9 drafting gates.

Manual & Automatic drafting

To set up the Weigh Scale for manual or auto drafting, complete the following:

1. **Manual Drafting:** Ensure that no port is set for drafting.
   For further details see *Communications* (p 28).

   Automatic Drafting: Configure the connection between the Weigh Scale and the Drafter. For further details see *Communications* (p 28).

2. Set the required draft mode.

   a) Turn the mode selection switch to **S**.

   b) Select **1. DRAFT/SORT MENU** and press the   SELECT   soft key.
   The current mode displays at the top of the screen.

   c) Press the   MODE   soft key until the required drafting mode is displayed.
   The drafting mode cycles between Drafting Off and Drafting from **2-way** up to **9-way**.

3. Set the required draft limits and gate number.

   a) Press the   ▽   soft key to select the draft limit you wish to change.

   To change a gate number:

   Note: If no drafter is enabled in the Communications menu (Manual drafting), then gate numbers are not displayed.

   - Press ⬸ to delete the existing gate number.
   - Use the keypad to enter the new gate number (0 to 9).

   To change a draft limit:

   - Press ⬸ to delete the existing draft limit.
   - Use the keypad to enter the new draft limit.

   Draft limits can be set using one decimal place up to 999.9kg.

   Note:
   Set up the draft limits so that the smallest is at the top and the largest is at the bottom. If you enter the draft limits out of order, the Weigh Scale reorders them once you press   OK   .

   b) Repeat steps for all required changes.

4. Press   OK   to save the changes and return to the **SET UP** menu.

Notes:

- To select a default drafting gate when draft limits have been turned off:
  a) Press the OFF soft key.
  b) Press CHANGE to scroll through the options either selecting OFF or a gate number for animals to bedrafted to, if a drafter is connected when drafting is turned off.

- On the 2 WAY DRAFTING screen, gate numbers are shown against the H Gates and L Gates labels.

- **H Gates** sets the gate number for animals that weigh anything **H**igher than the Draft Limit.

- **L Gates** sets the gate number for animals that weigh the Draft Limit or anything **L**ower than the Draft Limit.

- On the 3 WAY DRAFTING screen, gate numbers are shown against the H Gates, C Gates and L Gates labels.

  - **H Gates** sets the gate number for animals that weigh anything **H**igher than the Upper Limit.

  - **C Gates** sets the gate number for animals that weigh anything higher than the Lower Limit and inclusive of the Upper Limit.

  - **L Gates** sets the gate number for animals that weigh the Lower Limit or anything **L**ower than the Lower Limit.

- On the 4 WAY or more DRAFTING screen, gate numbers are shown as numbers, with gate 1 as the lowest limit.

Session menu

The **SESSION MENU** lets you select and then view, print, rename or delete sessions.

To display the Session Menu screen:

1. Turn the mode selection switch to **S**.

2. Select **SESSION MENU**.

    The following screen displays:

    ```
    ┌─────────────────────────────────────────┐
    │        12/02/04 (YEARLINGS)              │
    │ SESSION                                  │
    │ VIEW                                     │
    │ PRINT                                    │
    │ DELETE                                   │
    │     ▼      ▲    SELECT   NAME    OK       │
    └─────────────────────────────────────────┘
    ```
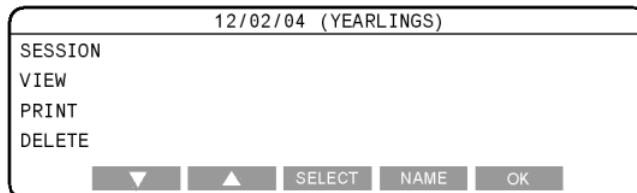
    The currently selected session displays in the title bar of the screen.

    You can use the ▲ and ▼ buttons to move between the options.

Note: Depending on the type of session (Standard, Trait or Draft list) currently selected the soft keys displayed will change.

Selecting a session

To select a particular session, complete the following steps:

1. Turn the mode selection switch to **S**.

2. Select **SESSION MENU**.

3. Press the ▲ or ▼ soft keys to highlight **SESSION**.

4. Press SELECT .

    A list of the stored sessions in the Weigh Scale displays.

    ```
    ┌─────────────────────────────────────────┐
    │           SELECT SESSION                 │
    │ 04/07/2002 (YEARLINGS)                   │
    │ 12/05/2002 (HEREFORDS)                   │
    │ 10/03/2002 @ 1028                        │
    │ 20/01/2002 (--)                          │
    │     ▼      ▲                    OK        │
    └─────────────────────────────────────────┘
    ```
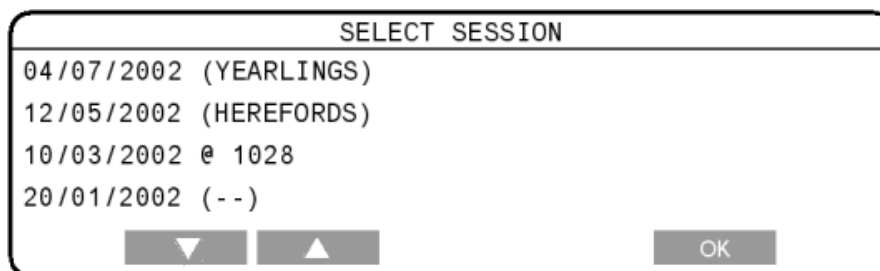
    Each session is identified by the date the session was created and by the session name (if one was entered).   If the session has no name, the time (using the 24 hour clock) the session was created displays (preceded by the "@" character).
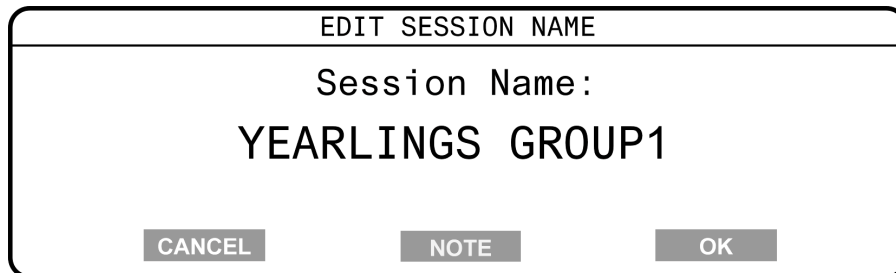
5. Press the ▲ or ▼ soft keys to highlight the required session.

6. Press OK to select the session and return to the Session menu.

Renaming a session

You can rename any of the Standard or Trait   sessions stored on the Weigh Scale from the Session menu.

To rename a session, complete the following steps:

1.   Select the session, see *Selecting a Session* (p 17).

2.   Press the   **NAME**   soft key.

```
                    EDIT SESSION NAME

                    Session Name:
                 YEARLINGS GROUP1


       CANCEL            NOTE             OK
```

The existing session name displays on the screen.

3.   Press the   ⬅   button to delete characters, as required.

Type in the new name, using the Weigh Scale keypad.

The session name can contain up to 17 characters.

4.   Press   **OK**   to save the new session name and return to the Session menu.

The new session name is displayed in the title bar of the screen.

Editing session notes

You can edit the **existing** session note of the Standard, Draft list or Trait sessions stored on the Scale from the Session menu.   If no session note was entered when the session was created you cannot add one.

To edit a session note, complete the following steps:

1.   Select the session, see *Selecting a Session* (p 17).

2.   Press the   **NAME**   soft key.

3.   Press the   **NOTE**   soft key.

```
              EDIT SESSION NOTE

             Session NOTE:

             EARLY BORN


       CANCEL        NAME           OK
```

Note: If the **Note** soft key does not display, the session does not have a session note.

4.   Press the ⬅ button to delete the existing note, as required.

5.   Type in the new note, using the keypad.

The session note can contain up to 13 characters.

6.   Press   **OK**   to save the new session name and note, and return to the Session menu.

The new session name is displayed in the title bar of the screen.

Viewing a session

To view the details of a session, complete the following steps:

1. Select the session, see *Selecting a Session* (p 17).

2. Press the [▲] or [▼] soft keys to highlight **VIEW**.

3. Press the [SELECT] soft key.

   The details of the session display.

TAG	WEIGHT	CON	NOTES
189	250.6	1	Vaccinate
145	270.8	2	
168	280.0	2	

   [▲] [▼]   [STATS] [OK]

4. Press the [▲] and [▼] soft keys to scroll through the details of the session.

   In a Standard session, the details include the Visual Tag Number, weight, condition score or any note entered for each record.

   In a Trait session, the condition score is not available and the traits are stored in the "Trait" column. In this view you cannot see the labels associated with each trait field. You can only see a list of the data you entered during the session.

5. Press [OK] to return to the Session menu.

Note: You cannot edit the weight records from this view. See *Editing weight records* (p 77) if you want to edit records in the current weighing session.

Displaying statistics for a closed session

To display the statistics of a closed session, complete the following steps:

1. Select the session, see *Selecting a Session* (p 17).

2. Press the ▲ or ▼ soft keys to highlight **VIEW**.

3. Press the SELECT soft key.

    The details of the session display.

TAG	WEIGHT	CON	NOTES
189	250.6	1	Vaccinate
145	270.8	2	
168	280.0	2	

    ▲ ▼ STATS OK

4. Press the STATS soft key.

Depending on the method of drafting (by weight or not) one of the following screens displays:

*   Weight Stats

*   Draft Stats

For details on these stats screens see *Statistics screen* (p 40).

Printing a session

Make sure a serial printer is connected to the Weigh Scale. To configure the port that the printer connects to on the Weigh Scale, see *Communications* (p 28) later in this section.

1. Select the session, see *Selecting a Session* (p 17).

2. Press the [▲] or [▼] soft key to highlight **PRINT**.

3. Press [SELECT] to print the session details or press [OK] to return to the Session menu.

4. Press [PRINT] to print the session on the attached printer.

Note: If a printer is not installed the Weigh Scale displays "No Printer Available".

Deleting a session

Note: Deleting a session removes it permanently from the Weigh Scale's memory. Before deleting a session it is recommended that you copy weighing sessions to your computer using the APS software supplied with the Weigh Scale.   Using APS, you can restore the deleted session to the Weigh Scale, by copying it from the computer at a later date. See Interfacing Software: APS for more information.

1. Select the session, see *Selecting a Session* (p 17).

2. Press the [▲] or [▼] soft keys to highlight **DELETE**.

3. Press [SELECT].

    A screen displays asking you to confirm you want to delete the session.

4. Do you want to delete the session?

    *   If yes, press [DELETE].

        The session is deleted and the Session menu displays.

    *   If no, press [CANCEL].

        The Session menu displays.   The session is not deleted.

Set the time and date

The **SET TIME AND DATE** screen lets you set the current time and date on the Weigh Scale's internal clock.

The system time and date is recorded each time you create a new weighing session.   You can view the current system time on the Weigh Scale's main screen when it is in Setup mode.

Note: The date format changes depending on how the country options are set up, see *Select a country* (p 33).   In New Zealand and Australia the date format used is DD-MM-YYYY. In the USA the date and time format is MM-DD-YYYY.   In French Canada the date format used is YYYY-MM-DD.

The time must be entered in 24-hour format i.e.

* 8:35 pm would be 20:35

* 8:35 am would be 08:35.

To change the time or date, complete the following steps:

1.   Turn the mode selection switch to **S**.

2.   Select **SET TIME AND DATE**.

The following screen displays.

```
                    SET  TIME  AND  DATE
   .


             12:56    08/11/2004



        ◀          ▶      DATE FRMT            OK
```
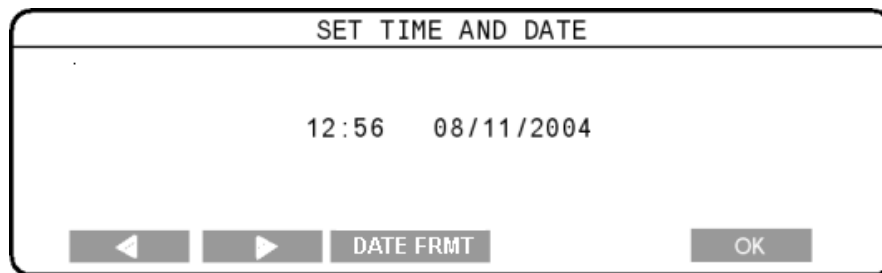
1.   Press the [◀] or [▶] soft keys to move to the digit that you want to change.

The currently selected digit flashes.

2.   Enter the new digit using the keypad.

The flashing digit is replaced with the typed number and the cursor moves to the next digit.

3.   Press the **Date Frmt** button to change the display and format of the date.

* Press the **Format** button to scroll through the 3 options.

* To change the forward slash (/) that separates the day, month and year, press the **Separator** button to scroll through the options.

4.   Press [OK] to save the new time and date format and return to the Setup menu.

Note: The colon that separates the hours and minutes is not able to be changed.

User options

This screen enables you to see the following user options:

- Weighing Mode
- EID required
- Weight Units - to use when weighing animals.
- Live Printing
- Tag Checking
- Average daily weight gain (ADG)

Changing a user option

To change a user option, complete the following steps:

1. Turn the mode selection switch to **S**.

2. Select **USER OPTIONS**.

```
                    USER OPTIONS
   Weighing Mode          Max speed (Sheep Only)
   EID Required           NO
   Weight Units           kg
   Live Printing          ON
        ▼                      CHANGE    OK
```
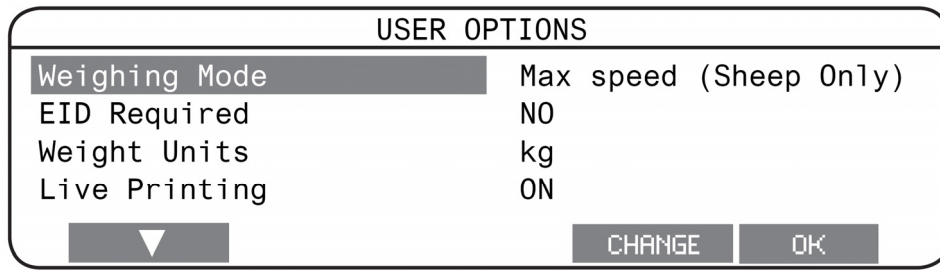
3. Press the [▲] or [▼] soft keys to highlight the option you want to change.

4. Press [CHANGE] to toggle between the available options.

5. Press [OK] to save the changes and return to the Setup menu.

See the following sections for more information on each of the user options.

Weighing Mode (p 25)

EID Required (p 25)

Weight Units (p 26)

Live Printing (p 26)

Tag Checking (p 27)

ADG Display (p 27)

Weighing Mode

Weighing Mode allows you to select the speed at which the scale will lock a weight.

Max Accuracy mode will take longer to lock a weight but will calculate a weight within ~99% of the animal's true weight.   This is well suited to weighing larger animals such as cattle or deer, where the speed of weight lock is less critical.

The **Max Speed (sheep only)** mode has been specifically developed to increase the throughput of sheep in an Auto drafter.   While less accurate at ~97% of the animal's true weight, this mode is significantly faster and well suited to applications where mob average weights are of interest, or where a high throughput is required.

The `OPTION` soft key allows you to specify when the animal data is recorded in the scale. By default, this will occur once 30% of the animal's locked weight has been removed from the load bars, however there are some applications where this may need to be set higher (so that more weight must be removed) or lower (so that less weight must be removed).

EID required

No

If you do not require an EID to be read by the Weigh Scale, the **EID Required** is set to **NO** (default setting). This option enables the configuration of a draft override gate and a time delay, to which, an animal without an Electronic ID will be drafted to, after the selected time delay has elapsed.

1. From the User Options screen, select **EID Required** and press the
    `CHANGE` soft key .
    The following screen will be displayed:

```
            EID REQUIRED SETUP

  EID Required                    NO
  Draft Override Gate             Others
  Delay Draft/Weight lock         4 seconds


      ▼                       CHANGE    OK
```

2. Use the arrow key to select **Draft Override Gate**. If no gate is selected (**Others**), the animal will be drafted off to the **Others** drafting gate after the elapsed time defined by the **Delay Draft/Weight lock**.   Press the
    `CHANGE` soft key to make your gate selection. Pressing **Change** will

scroll through gates 1-9 and back to Others.

```
┌─────────────────────────────────────────────────┐
│            EID REQUIRED SETUP                     │
│  ┌─────────────────────────────┐                  │
│  │ EID Required                │    NO            │
│  └─────────────────────────────┘                  │
│    Draft Override Gate              1             │
│    Delay Draft/Weight lock          4 seconds     │
│                                                   │
│   ┌──────────────┐        ┌──────────┐ ┌──────┐   │
│   │      ▼       │        │  CHANGE  │ │  OK  │   │
│   └──────────────┘        └──────────┘ └──────┘   │
└─────────────────────────────────────────────────┘
```

3. Use the arrow key to select **Delay Draft / Weight lock** and press the **Change** soft key to select the time delay before an animal is drafted out. The values available are 0, 2, 4, 8, 16 seconds.

    Note: The value selected is the time allowed for an EID to be read before the animal is drafted out to the override gate or locking a weight.

4. Press `OK` to confirm the settings made.

Note: These settings only have an effect when the scale is set up for weighing. i.e. the loopback cable is plugged into the scale not the Autodrafter.

Yes

When **EID Required** is set to **YES**, and an animal doesn't have a successful read of an EID or it does not have an EID, then it is not released from the drafter. The animal will need to be manually drafted out using the remote control or by other means, depending on the drafter type, as the Scale will have no further communication with the drafter for the current animal.

Note: When drafting and weighing, the weight will not be locked until an Electronic ID is received, no information for the animal will be recorded in the session file. If you apply an Electronic ID tag to the animal, and scan that Electronic ID tag, then the animal will be released, and information will be recorded in the session file.

Weight units

You can specify whether the Weigh Scale uses kilograms (kg) or pounds (lb) for displaying and storing weights.

Live printing

When Live Printing is turned on, the Weigh Scale prints the weight, tag number and condition score each time it locks onto a weight.

Live Printing only occurs if you have connected a serial printer to the Weigh Scale and set the port to Printer. See *Communications* (p 28).

To print the weights at the end of the session, see *Session menu* (p 17).

Note: This feature does not work with a standard computer printer, you need a serial (or ASCII) printer.

Tag checking

If **Tag Checking** is on, the Weigh Scale checks for duplicate Visual Tag Numbers. If a duplicate occurs within a weighing session, the Weigh Scale lets you edit either the current Visual Tag Number or the one that occurred earlier in the session.

A duplicate Visual Tag Number can occur for any of the following reasons:

- The same Visual Tag Number is entered twice during a session.

- A Visual Tag Number is entered using the keypad and an Electronic ID is scanned that has the same Visual Tag Number assigned in the Weigh Scale's cross-reference table.

- Two Electronic IDs are scanned and each has the same Visual Tag Number assigned in the Weigh Scale's cross-reference table.

Note: The Weigh Scale checks for a duplicate Visual Tag Number, not a duplicate Electronic ID. This means duplicate Electronic IDs can occur in a session, provided that the Electronic ID does not have a Visual Tag Number linked to it in the Weigh Scale's cross-reference table.

See *Checking for Duplicate Visual Tag Numbers* (p 84) for instructions on editing duplicate Visual Tag Numbers when they occur.

ADG Display

With **ADG Display** turned on, the Weigh Scale calculates the average daily gain (kg/day or lb/day) of the animal being weighed. It is calculated between the animal's current weight and the most recent previous weight recorded for that animal.

The default setting for this option is ON.

When ADG Display is turned OFF, the indicator does not display the ADG nor recalculate it.

Note: If you do not use the ADG information, it is recommended this option is set to OFF, for improved performance from your Weigh Scale.

Communications

The Communications menu enables you to tell the Weigh Scale what device is connected to each port. The ports are located on the upper left hand edge of the Weigh Scale.   Once you attach a device to a port, you must configure the port to suit.

The W810 v2 has Bluetooth functionality that enables the Weigh Scale to receive Electronic ID data from a Bluetooth equipped EID Reader.
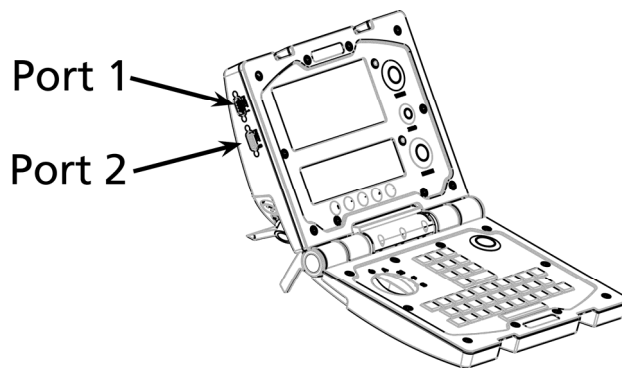
To display the Communications menu, complete the following steps:

1.   Turn the mode selection switch to **S**.

2.   Select **COMMUNICATIONS**.

A screen similar to the following displays:
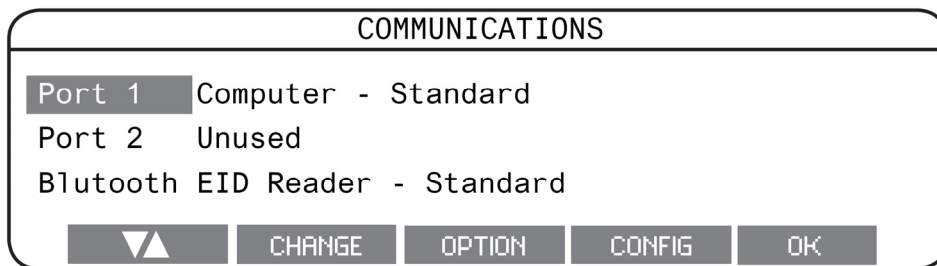
Note: Depending on the current settings - different buttons may be displayed.

To connect a device by cable, refer to *Setting up a port* (p 29).

To connect an EID Reader by Bluetooth, refer to *Setting up a Bluetooth port* (p 31).

Setting up a port

To select the device to attach to the port, complete the following steps:

1. In the Communications menu, press the ▲▼ soft key to select the port the device is connected to.

2. Press the CHANGE soft key repeatedly until the device that is attached to the port is displayed.

   Note: You cannot select a device for one port if it is already selected for the other. For example, you cannot select **Computer - Standard** on Port 2 if it is already selected on Port 1.

3. Press the OPTION softkey repeatedly until the correct option for the selected device is displayed.

   E.g. Press CHANGE to select Drafter/Sorter, then press OPTION to select the type of Drafter that is connected, for example, Sheep Auto Drafter.

4. Press CONFIG to view the advanced options for the port set up. This is not usually needed by most users.

   a) Press the ▲ or ▼ soft keys to highlight the option you want to change.

   b) Press CHANGE to toggle between the available options.

   c) Press the PORT softkey to set up the selectable baud rate.

   d) Press OK to save the Port settings.

   Note: When connecting to Port 2, an extra menu option, **External Port Power** will be displayed. Select ON or OFF for this option which enables voltage between Pin 5 (Ground) and Pin 9 (RI - Ringing Indicator).

5. Press OK to save settings and return to the Setup menu.

See the following table for the Port options available on the scale:

Device	Options	Description
Unused		The port is unused (this is the default option).
Computer	Standard	Enables the connection of a computer. Used to copy weighing sessions to or from the computer.
	ASCII	Used for third party applications.
EID Reader -	Standard	Enables the connection of a Gallagher/Standard Electronic ID stick reader with a set baud rate. See *Using electronic tags* (p 34).

Device	Options	Description
	Destron	Enables the connection of a Destron Electronic ID reader.
Drafter	Sheep Auto Drafter	Enables the connection of a Gallagher Sheep Auto Drafter.
	H-Dale / CWC	Select the type of Auto Drafter connected to the scale.
	Heenan	
	Prattley	
	Racewell	
	Custom	Allows the drafter protocol to be adapted for custom applications.
Data-Output	Printer	Enables the connection to a serial (ASCII) printer. Used to print weighing session data either during or after the session.
	Data Logger	Enables the connection of a data logger. Used to log weight records during a weighing session. Press the **CONFIG** soft key to select the type of information to be captured.
	Ruddweigh	Enables the connection of devices using the Ruddweigh protocol. Not available in some countries. (NZ/AU only) Press the CONFIG soft key to select the type of information to be transmit by the scale.

Setting up a Bluetooth port

The Weigh Scale W810 v2 has internal Bluetooth that allows communication with a Bluetooth Electronic ID reader. Your Electronic ID reader will need to be paired with the Weigh Scale.

Note: The Bluetooth port must be configured to a device and not "Unused" before it will be discoverable and able to be searched for by other devices.

To attach a Gallagher HR3 Reader to the Bluetooth port, complete the following steps:

1. From the Communications menu, press the [△▽] button to select the **Bluetooth** port.

2. Press [CHANGE] and [OPTION] if required, to display **EID Reader - Standard**.

3. Press the [CONFIG] soft key.

4. Press [BLUETOOTH] to display the MAC address for the scale.

```
            BLUETOOTH SETTINGS

   Bluetooth MAC:00:07:80:94:20:db
   Paired: GGL HR3
   Paired MAC:00:02:72:e1:a7:59



                                    OK
```
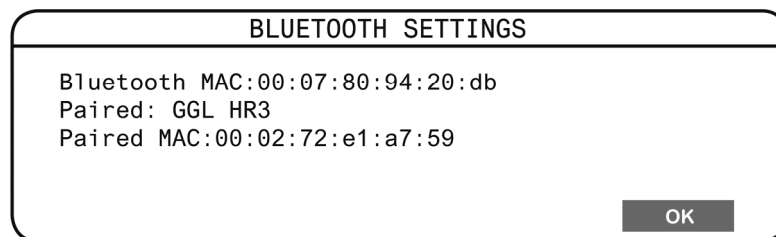
5. You will need to configure your HR3 reader with the Scale MAC address. This is usually done with the Configurator software supplied with your Electronic ID reader.

6. When the device has paired to the Weigh Scale a blue LED light will display on the Weigh Scale alongside the LCD screens. The Bluetooth Settings screen will show the device type and MAC address of the device connected.

7. Press [OK] to save the settings and return to the Setup menu.

Autodrafter

The Weigh Scale can interface directly with autodrafters. There are six drafter options for communicating with the connected port.

The Weigh Scale sends drafting commands to the autodrafter during the weighing session.

To connect an autodrafter with the Weigh Scale, complete the following steps:

1. Turn on the Weigh Scale.

2. Ensure the autodrafter is turned off.

3. Connect the autodrafter to one of the ports on the Weigh Scale.

4. Set the port to the required option. See *Communications* (p 28) for more information.

5. Turn the autodrafter on.

Note: For information about setting up the autodrafter into three-way drafting, see *Draft menu.* (p 14)

Power feed to Electronic ID readers

The Weigh Scale can supply power to an Electronic ID reader.   Power is supplied only if the reader is connected to Port 2 and if either one of the Electronic ID reader options is selected.

With Port 2, if you nominate a device other than an Electronic ID reader, the power feed is disabled but can be manually configured via the advanced setup menus.   If the Electronic ID Reader you are using does not require power from the Weigh Scale, you can connect it to either Port 1 or Port 2.

Select country

The Select Country menu lets you select the required country settings.
The Weigh Scale country settings determine the following:

- the language used with the screens and prompts;

- some country-specific terminology; and

- some default options.

To display the Select Country menu, complete the following steps:

1. Turn the mode selection switch to **S**.

2. Select **SELECT COUNTRY**.

   The following screen displays:

Changing the country and language

1. To change the country, press the [△] or [▽] soft key to select the desired country.

2. To change the language, press the **Language** soft key.

   The following screen displays:

   - Press the [△] or [▽] soft key to select the desired language.

   - Press [OK] to save the language.

     The selected language will be displayed on the Select Country screen.

3. Press [OK] to save the changes to the Select Country screen.

   IMPORTANT: Ensure that the country set on your Weigh Scale is the same as the country set in APS.

   To obtain further language files, refer to *Change APS's language* in your APS User Manual.

USING ELECTRONIC IDS

The Weigh Scale can be used with an electronic ear tagging system. During a weighing session an animal can be identified by reading its Electronic ID. You can use Electronic IDs on their own, or the Weigh Scale can also link and store the Visual Tag Number that identifies the same animal. The Visual Tag Number is whatever alpha numeric (up to 15 characters) code that you choose to enter against an Electronic ID for a given animal. It might be based on the visible number printed on the ear tag or a combination of the number and the colour of the ear tag: "1234" or "123RED" etc.

Setting up the Weigh Scale to use Electronic IDs

The Electronic ID reader connects to one of the serial ports on the Weigh Scale. As described in *Communications* (p 28), this port must be set to read **EID Reader - Standard**.

Cross-referencing Visual Tag Numbers

The Weigh Scale maintains a cross-reference table that links an animal's Electronic ID with the animal's Visual Tag Number.   Once it makes this link, the Weigh Scale remembers the Visual Tag Number the next time the Electronic ID is read.

The Weigh Scale can store up to 21000 links between Electronic IDs and Visual Tag Numbers. If the limit is exceeded, new links between an Electronic ID and its Visual Tag Number cannot be stored. In this case, the next time the Electronic ID is read, its Visual Tag Number will not display. Warnings will appear leading up to this. See *Memory full warning* (p 88).

Linking an Electronic ID to its Visual Tag Number

The first time you use an Electronic ID, follow these steps:

1. Read the animal's Electronic ID. You can read the Electronic ID before the animal steps on the platform or while the animal is on the platform.

2. The last four digits of the Electronic ID, preceded by a colon, display on the Weigh Scale's screen:
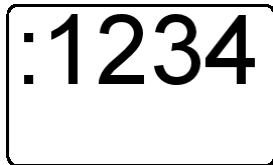
3. If you want to assign a Visual Tag Number to the Electronic ID, enter the number now, using the keypad. You must not enter the Visual Tag Number until the Electronic ID is displayed on the Weigh Scale's screen. The Visual Tag Number must also be entered before the animal leaves the platform.

4. After the animal has left the platform, the Electronic ID and Visual Tag Number will be linked together in the cross reference table in the Weigh Scale's memory. A record is also stored in the current session according to normal Weigh Scale behaviour.

If you do not assign a Visual Tag Number, each time you read the Electronic ID in future, the last four digits of the Electronic ID, preceded by a colon, will display on the Weigh Scale's lower screen. Each time the Electronic ID is displayed you have the opportunity to enter, and link it to, a Visual Tag Number.

Once you have linked an Electronic ID with a Visual Tag Number, only the Visual Tag Number will display on the Weigh Scale's screen each time the Electronic ID is read in a future weighing session. See *Assigning Visual Tag Numbers to Electronic IDs* (p 81).

You can follow these steps during a weighing session or without having to weigh. In the latter case, you must use Manual mode with no loadbars connected. See *Recording standard animal information* (p 82).

Updating Incorrect Visual Tag Numbers in the Cross-Reference Table

Once a link between an Electronic ID and its Visual Tag Number has been made, you can edit it if it is incorrect using one of the following methods:

1. Editing the weight record in the current session. See *Editing weight records* (p 77).

2. Using APS to update the cross-reference table. Refer to the *APS User Manual* for detailed instructions.

SESSIONS

A session is a collection of weight records for which the Weigh Scale displays statistics.

Sessions have a start date but can remain open for a period of time. Each weighing event adds a record to the current session. To keep weight gain calculations accurate, it is recommended that you start a new session whenever you weigh a new group of animals.

Each time data is collected a record is created. The date on which a new record is created is stored within the session but is not displayed on the Weigh Scale. This date is used to calculate the weight gain for an animal and is copied to APS with the session.

Note: Session files on the Weigh Scale should be closed regularly - generally at the end of a weighing session. If sessions are left open for longer than 2.5 years the oldest record dates may become inaccurate.

Sessions overview

There are three types of sessions:

Standard Session	These sessions allow recording of standard animal information (note and condition score).
Trait Session	These sessions let you record up to eight traits for each animal. The traits that you can record in the session are defined in APS and copied to the scale, prior to the session. Up to 10 trait tables can be defined and copied to the Scale. When a Trait session is created you can select which trait table to use as a template.
Draft List Session	These sessions let you draft animals according to their Electronic ID. The draft list is set up in APS and copied to the Scale prior to the session.

In addition to there being three types of session, the Scale also works in three different modes: Automatic, Manual and Fine. The other variable that affects the operation of the Scale is whether loadbars are connected. The Scale is able to perform different functions depending on the mix of these three variables. Those function capabilities are summarised in the following table:

Loadbars Connected

	Automatic Mode	Manual Mode	Fine Mode
Standard Session	• Store Animal Weights Automatically • Record Animal Information • Draft by Weight	• Store Animal Weights on Key Press • Record Animal Information • Draft by weight	• Store Animal Weights on Key Press • Record Information (two fields)
Trait Session	• Store Animal Weights Automatically • Record Animal Traits • Draft by weight	• Store Animal Weights on Key Press • Record Animal Trait • Draft by weight	• Store Animal Weights on Key Press • Record Information (eight fields)
Draft List Session	• Store Animal Weights Automatically • Record Animal Information • Draft by list	Not used	Not used

No Loadbars

	Automatic Mode	Manual Mode	Fine Mode
Standard Session	• Store Electronic IDs • Update Cross-Reference Table	• Record Animal Information • Update Cross-Reference Table	Not Used
Trait Session	• Store Electronic IDs • Update Cross-Reference Table	• Record Animal Traits • Update Cross-Reference Table	Not Used
Draft List Session	Not recommended for use	• Draft by list • Update Cross-Reference Table	Not Used

Definitions

Record Animal Information	Condition Score, Notes as well as the animal's Electronic ID and Visual Tag Number.
Record Animal Traits	Up to eight fields, defined in APS, as well as the animal's Electronic ID and Visual Tag Number.

Session naming formats

Each session file name has the following format:

`YYYY-MM-DD hh-mm NAME`

Where…	Is the…	Example…
`YYYY`	4 digit year	2003
`MM`	2 digit month	06
`DD`	2 digit day	24
`hh`	2 digit hour in 24 hour format	13
`mm`	2 digit minutes	15
`NAME`	Name of the weighing session that will display on the Weigh Scale. The name varies depending on session type, as below;	
`STANDARD SESSION NAME`	The name can contain up to 17 characters and is chosen by the user. All letters will be upper case. **Note**: When the Weigh Scale creates an unnamed session file, the name is automatically set to `--`.	STEERS
`DRAFT LIST SESSION NAME`	When APS creates a draft list session, the name is automatically set to `Draft List`.	Draft List
`TRAIT SESSION NAME`	When the user creates a trait session, the name will default to the Trait Table used for the session and will contain upper and lower case letters.	Trait Custom

Examples of valid formats

The following are examples of valid Weigh Scale session file names.

`2004-01-25 15-20 STEERS`
`2003-12-04 16-30 @1630`
`2004-03-16 11-20 Draft List`
`2004-03-16 11-20 Trait Mature`

Note: Although you didn't see the session start time on the Weigh Scale (unless the session has no user-entered name) it is always stored with the session name.

The following are examples of valid Reader session file names.

`2006-03-07 15-21 Session01`
`2005-03-07 15-21 Session02`
`2005-03-07 15-21 Session03`

Storage capacity

The information gathered each time the Weigh Scale makes a measurement is called a record.

The Weigh Scale can store up to 60000 records.   These include the records of all sessions including the current one. See *Memory Full Warning* (p 88).

For information about the maximum number of cross references the Weigh Scale can store, see *Cross-referencing Visual Tag Number's* (p 34).

Session statistics

The Weigh Scale gathers statistics as it weighs.

Statistics can be presented in four ways:

- a summary of weights.   See *Statistics screen* (p 40).
- a summary of weight-gains.   See *Weight gain screen* (p 42).
- a list of all the weights recorded.   See *Weight records screen.* (p 43)
- a summary of carcass weights.   See *Carcass weight screen* (p 45).

The Weigh Scale displays statistics of the current session in the lower screen. As weighing progresses, the statistics screen updates.

Selecting a view

To select a different data view during a weighing session:

1.   Turn the mode select switch to either **A**, **M** or **F**.

2.   Press SCREEN to cycle through the available screens.

The data displayed on each of the screens is described in the following sections.

Statistics screen

The **Weight Stats** or **Draft Stats** screen displays summary weight data for animals in the current weighing session. The screen that is displayed depends on the weighing mode that you are using and whether drafting is turned on or off.

Statistics can be displayed for closed sessions, see *Displaying statistics for a closed session.* (p 21)

Weight statistics

The **Weight Stats** screens displays if:

- drafting is switched off, or
- you are weighing in fine mode.

This **Weight Stats** screen shows the number, average, total, highest and lowest weights for all the animals in the current session.

The left hand side of the lower screen displays information about the animal **currently** being weighed.


```
Tag number prefix

(1)            WEIGHT STATS [kg]
               Number      21
   115         Average     286
    8          Total       6006
               Lowest      257
 1.09 kg/day   Highest     341
        PRINT  PREFIX  NEW  SCREEN
  Weight gain      Condition score
Tag code, including the prefix
```
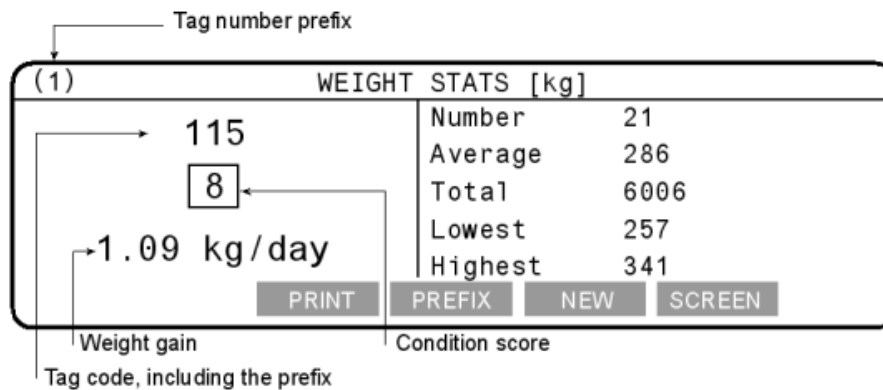
Note: If the ADG Display is turned to Off in User Options, the weight gain will not be displayed on the screen.

Draft statistics

The **Drafting Stats** screen displays if:

- drafting is turned on, and

- you are in either automatic or manual weighing modes

The details on the lower screen change depending on the drafting mode selected.   The screen shows the number, average and total weight of the animals in each drafting category as well as the gate through which the animal was drafted. The following screen shows the details for three way drafting.

```
(Q)                DRAFT STATS
                 Lim    250   300
                 Gate   Low   Mid    High
                 Num    12    8      10
                 Ave    241   269    312
                 Tot    2892  2152  3120
                  PREFIX      NEW       SCREEN
```

If you are drafting four ways or more, the statistics screen displays as shown:

```
(Q)                DRAFT STATS
                 Lim    250   300    350
                 Gate   1     2      3
                 Num    12    8      10
                 Ave    241   269    312
                 Tot    2892  2152  3120
        ▶      PRINT   PREFIX    NEW      SCREEN
```

If you are drafting by D*raft List*, the Statistics screen changes to

Number of animals drafted so far through the gate assigned to group 1

Number of animals listed to be drafted in group 1

```
(Q)              (D)  DRAFT STATS
                 Group  0      1      2
                 Exp    0      5 ↵    15
                 Act    2      3  ↵    1
                 Exp Total     46 ◄
                 Act Total     9  ◄
        ▶              PREFIX    NEW    SCREEN
```

Total number of animals drafted so far through all gates

Total number of animals listed to be drafted

Note:

The   **PRINT**   soft key is only displayed if one of the Weigh Scale's ports is configured for a printer.   For information on connecting a printer to the Weigh Scale see *Communications* (p 28).   With a printer connected and configured you can print the statistics on this screen.

- Pressing the soft key allows you to scroll through the draft statistics for the other gates.
- Pressing the soft key changes which statistic screen displays.

Weight gain screen

The Weight gain screen shows weight gain data for the animal being weighed and weight gain statistics for all animals in the session.
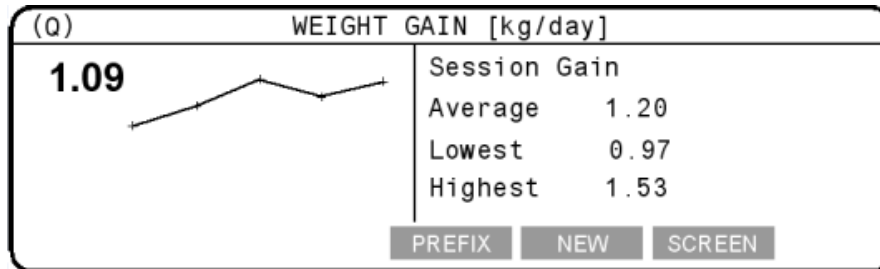
The weight gain graph on the left side of the screen shows the change in an animal's weight gain from one session to the next. The vertical axis represents weight gain, the horizontal axis represents time. Each point on the graph represents the weight gain (in /day) that occurred between two weighing sessions.

For example, if the graph slopes upward, the rate of weight gain has increased. If the graph slopes downward the rate of weight gain has decreased.

Note: Provided the weight gain figure is positive the animal has gained weight. The graph plots changes in weight gain not changes in weight.   A downward slope in the line on the graph indicates a decrease in the rate of weight gain, not a decrease in actual weight.

The weight gain (in /day) for the animal currently being weighed is displayed in the top left corner of the screen. This is also the last point on the graph. For example, in the screen shown above, the weight gain for the current animal and the last point on the graph is 1.09 /day. The graph shows that only one of four previous sessions has matched this weight gain.

For the graph to be displayed:

1. There must be at least two previous sessions with a weight recorded for this animal (i.e. with the same tag number).
2. The sessions must have been created on different dates.

The weight gain is calculated from the weight recorded in the most recent session for the same tag number. If there is no previous data for an animal, the screen displays "--.-" in place of the weight gain figure.

Note: The session statistics (average, lowest and highest weight gain per day) displayed on this screen only include those animals for which weight comparisons can be made. The statistics do not include animals which are being weighed for the first time and therefore have no weight gain comparison.

Weight records screen

Weight records screen for a standard or draft list sessions

During a Standard or Draft list weighing session, the Weight Records screen shows the data recorded for each animal:

- Visual Tag Number

- Weight

- Condition score

- Notes

You can use [▲] and [▼] to scroll up or down the list and view or edit other weight records in the current session.

The last weight to be recorded is displayed at the top of the screen.

Tag count

( )	0:TAG	WEIGHT	CON	NOTES
	149	564.0	9	IA 27/08
	138	486.0	9	IA 25/08
	125	414.0	7	IA 25/08

| ▲ | ▼ | EDIT | NEW | SCREEN |

This screen can also be used to edit the weight records in the current session. For further information, see *Editing a weight record from a standard or draft list session* (p 77).

The **Tag Count** value represents the number of Electronic ID tags read when the loadbars are **not** connected.

Weight records screen for a Trait session

During a trait session, the Weight Records screen shows the data recorded for each animal:

- Visual Tag Number
- Weight
- Trait entries

You can use [▼] and [▲] to scroll up or down the list and view other weight records in the current session.

The last weight to be recorded is displayed at the top of the screen.

```
 ( )       TAG        WEIGHT              Trait Mature
          149        564.0                  CL24U8
          138        486.0                  TL89R9
          125        414.0                    _ _

         [▲]   [▼]    EDIT     NEW     SCREEN
```

This screen can also be used to edit a Visual Tag Number in the current session. For further information, see *Editing a weight record from a Trait session* (p 78).

Carcass weight screen

The Carcass Weight screen displays the carcass weight of the animal. The carcass weight is calculated using the kill-out percentage that you enter. The carcass weight statistics are displayed on the right hand side of the screen. The format is the same as that used in the WEIGHT STATS or DRAFTING STATS screens.

Tag number prefix   Killout percentage   Number, average and
                                                           total carcass weight for each
                                                           drafting category

```
(1)        CARCASS WEIGHT [kg] (53.0%)
                              Low    Mid   High
                       Num    12      8     10
          154          Ave    127    142    165
        294.1 kg       Tot    1533  1140   1653

          PERCENT   PREFIX    NEW    SCREEN
```

Tag number, including prefix   Carcass weight of the animal currently being weighted

The carcass weights on the screen shown above are based on a kill-out percentage of 53%. Within each drafting category, the average and total carcass weights displayed will be 53% of the average and total weights recorded for the session. The number of animals in each drafting category is displayed. If drafting is turned off, the lowest and highest carcass weight is also displayed.

Note: If the kill-out percentage is changed during the weighing session, the carcass weights are recalculated.

Kill out percentage

To change the kill-out percentage:

1.   Press   **PERCENT** .

     The current kill-out percentage screen displays.

2.   Press ⬅ to delete the current kill-out percentage.

     Each time you press ⬅ one character is deleted.

3.   Enter the new kill-out percentage using the keypad.

4.   Press   **OK**   to save the change and recalculate the carcass weights based on the new kill-out percentage.

PREPARING TO WEIGH

Weighing modes

Automatic

Automatic mode is recommended for yards that allow a smooth flow of animals across the weighing platform.

In Automatic mode, the Weigh Scale automatically starts the weight measurement process as soon as the animal steps onto the platform. After the weight has been captured, the Weigh Scale beeps and displays the captured weight. The captured weight continues to display until the next animal steps onto the platform.

After the animal leaves the platform, the Weigh Scale attempts to compensate for the weight of any accumulation of mud or dung left on the platform. If it succeeds, the Weigh Scale displays a zero icon. If it does not you can manually restore zero by pressing the blue zero button.

Manual

Manual mode is recommended for yards that do not allow a smooth flow of animals across the weighing platform or where the animals are restless. This mode allows the operator to decide when the measurement is made.

In manual mode, the operator presses the green weigh button to start the weight measurement process. After the weight has been captured, the Weigh Scale beeps and displays the captured weight. The captured weight continues to display until the next animal steps onto the platform.

After the animal leaves the platform, the Weigh Scale attempts to compensate for the weight of any accumulation of mud or dung left on the platform. If it succeeds, the Weigh Scale displays a zero icon. If it does not you can manually restore zero by pressing the blue zero button.

Fine

Fine mode is recommended for weighing static loads such as fleeces or produce.

In Fine mode, the Weigh Scale displays the weight on the platform in the same way as a bathroom scale.

If a weight measurement is to be added to the session statistics, the operator presses the green weigh button.   The weight is captured at this point, but it is not stored in the weight record until the weight is removed from the platform. After the weight has been captured, the statistics are updated. For information about statistics, see *Session statistics* (p 39). The displayed weight continues to reflect the actual weight on the platform.

In Fine mode, automatic zero tracking is switched off. This means the Weigh Scale does not automatically compensate for the weight of objects left on the platform after the load has been removed. For more information, see *Zero tracking* (p 87).

The blue zero button has a function in Fine mode if you want to make net-weight measurements of a load inside a container.   For example, you could place an empty container on the weighing platform and press the blue zero button.   If you then filled the container, the weight indication will be only that of the container's contents.

Note: In Fine mode, after the blue zero button has been pressed, the weight indication shows zero but the `ZERO` icon does not display.

Weigh Scale layout
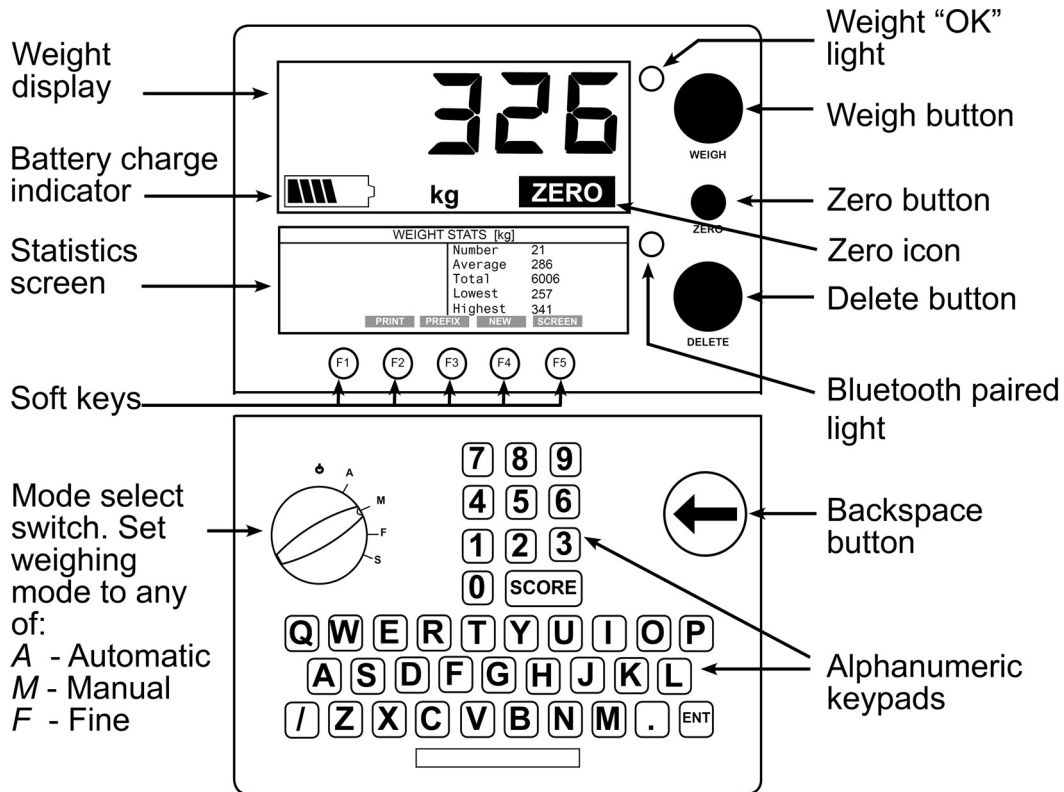
Note: If you are using the Weigh Scale without connection to an external power source, ensure that the battery has been charged overnight before use.

Connecting the Weigh Scale to the loadbars

Before you begin the weighing session, complete the following steps:

1. Open the Weigh Scale case.

2. Mount the Weigh Scale on a flat surface or clip it onto the Weigh Scale bracket.
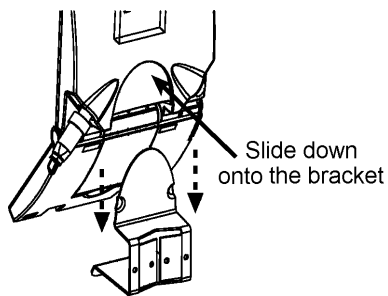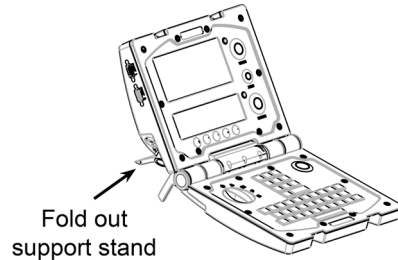
3. Ensure all required accessories are connected and setup, for example:

   - Loadbars

   - Drafters

   - Electronic ID readers

4. Determine if you require additional power for the Weigh Scale.

   Either connect to an AC outlet via the battery charger or connect to a 12 volt battery.

   If you are not connecting to an external power source, the Weigh Scale's internal battery should be fully charged. See *Charging the Battery* (p 5), if required.

5. Check and update the setup options, as required. See *Setup* (p 10) for further details.

Setting the tag prefix

Tag numbers can have common prefixes. Once you configure a tag number prefix on the Weigh Scale it is inserted at the start of any Visual Tag Number you enter during the session.

To set the tag number prefix, complete the following steps.

1. Turn the mode select switch to **A** (Automatic) or **M** (Manual).

2. Press ⬚PREFIX .

3. Type in the prefix, using the keypad.   The prefix can contain up to four characters.

4. Press ⬚OK to save the prefix.

WEIGHING IN A STANDARD SESSION

Creating a new standard weighing session

To create a new standard weighing session, complete the following steps:

1. Turn the mode select switch to **A** (Automatic) or **M** (Manual).

2. Press the NEW soft key.

   The **NEW SESSION** screen displays:

   ```
   ┌──────────────────────────────────────────────┐
   │              NEW SESSION                       │
   ├──────────────────────────────────────────────┤
   │  Session Name:                                 │
   │                                                │
   │          Enter a Session Name                  │
   │        or select from options below            │
   │                                                │
   │   CANCEL           TRAIT DRAFTLIST    OK       │
   └──────────────────────────────────────────────┘
   ```

   The options for Trait or Draft List only show when there are such sessions present in the Scale:

3. Type in the required session name using the keypad.

   The name can be up to 17 alpha-numeric characters long.

   Press the ⬅ key to delete characters.

   Note: You can leave the session unnamed.

4. Press OK.

5. If prompted, type in a session note (can be left blank).

   ```
   ┌──────────────────────────────────────────────┐
   │              NEW SESSION                       │
   ├──────────────────────────────────────────────┤
   │  Session Note:                                 │
   │                                                │
   │          Enter a Session Note                  │
   │                                                │
   │   CANCEL                           OK          │
   └──────────────────────────────────────────────┘
   ```

   The session note can be up to 13 alpha-numeric (including full stop, forward slash and space) characters long.

   Press the ⬅ key to delete characters.

   Press the OK soft key to save the note.

   Note:

   - The APS software sets whether the **Session note** option displays on the Weigh Scale, via the *APS - Configure* menu.

   - Adding a session note reduces the number of records stored on the Weigh Scale by one.

   - The entered session note is transferred to APS with the session data.

   - The session note details are stored in the first record of the session file.

6.   The Weighing Mode Setup screen will display.

   a)   To change the default weighing mode, press the [CHANGE] soft key to select the weighing mode. See *User Options - Weighing Modes* (p 25) for more information.

   b)   Press the [OPTION] soft key for advance options regarding the weighing mode.

7.   Press [OK] to save the session.

   The new session is created and a statistics screen displays with all values set to zero.

The previous session is closed and stored in the Weigh Scale's memory and can be viewed using the Session menu.   See *Session menu* (p 17).

Procedure for weighing animals in a standard session

To weigh an animal in a standard session follow this procedure:

1. Select the weighing mode that you want to use by turning the mode select switch to **A** (automatic) or **M** (manual).

   When the Weigh Scale is switched on, the previous weighing session is still the current session.
   You can choose to create a new weighing session, see Creating a new standard weighing session for more details.

2. If required, you can enter an ear tag prefix for the animals being weighed. See *Setting the tag prefix* (p 49) for further details.

3. Check that the ZERO icon is displayed. If it is not displayed, press the blue "zero" button to zero off any weight (e.g. dirt or manure) left on the platform.

4. Load the animal onto the platform. Ensure the animal is contained on the platform (e.g. no hooves off the platform and no one holding the animal).

5. If required, you can record the animal's Visual Tag Number or scan an Electronic ID.

   • **Using Electronic IDs:**

   Scan the animal's Electronic ID.

   The Electronic ID can be scanned at any time before or while the animal is on the platform.

   If you are using Electronic ID numbers only, the last 4 digits of the tag number preceded by a colon (:) displays on screen.

   If you entered a Visual Tag Number the first time the Electronic ID was scanned, the Visual Tag Number displays on screen.

   If this is the first time you have scanned the Electronic ID and you want to enter an associated Visual Tag Number, you can enter it now. In future, each time you scan the Electronic ID, the associated Visual Tag Number will display on screen.

   See *Using Electronic IDs* (p 34) for further details.

   • **Using Visual Tag Numbers:**

   Use the keypad to enter the Visual Tag Number. Up to 15 characters, alphabetic or numeric, can be entered.

   If an incorrect Visual Tag Number is entered, press ⬅ to delete each incorrect character. Re-enter the correct tag number.

   The Visual Tag Number can be entered at any time before or while the animal is on the platform.

   When the Visual Tag Number is entered, the date and any note or trait entered, the last time the animal was weighed displays on the screen.

   Note: Please ensure that the **ADG Display** is enabled in the **User Options** menu if you want to see the weight gain, last recorded weight, trait record and notes which were recorded during a previous weighing session. If this

option is not switched **ON** when you scan an EID, the previous note, either trait or user entered note data, will not be displayed.

6. If you want to view the most recent trait record, recorded for this animal in more detail, press the DETAILS key. When this key is released, the display will revert to the previous screen.

7. If required, you can store information about the animal being weighed using the "Condition Score" and "Notes" fields.

    Refer to the following table for instructions on entering a condition score or note. You can enter this information before the animal steps onto the platform (i.e. when the platform is empty) or while the animal is on the platform.

Field	What can be stored	How to use
Condition Score	One or two digits	Press the SCORE button on the keypad and type the score.
Notes	Up to 13 characters, alphabetic or numeric.	Press the ENT button on the keypad and type the note.

    If an incorrect entry is made, press ⬅ to delete each incorrect character and then re-enter the correct information.

8. Follow the instructions for the weighing mode you have selected.

    *   **Automatic Mode**   When the Weigh Scale has determined an accurate weight for the animal, it locks on to the weight and holds it on the screen. The time taken to lock on to the weight varies depending on the movement of the animal.

    *   **Manual Mode**   Press the green weigh button to start weighing the animal. When the Weigh Scale has determined an accurate weight for the animal, it locks on to the weight and holds it on the screen. The time taken to lock on to the weight varies depending on the movement of the animal.

9. When the Weigh Scale has locked onto the weight:

    *   the "Weight OK" light illuminates;

    *   OK displays on the screen;

    *   the Weigh Scale beeps;

    If drafting is turned on, the gate number displays indicating the drafting category.

If available on the Weigh Scale, the last recorded weight for the identified animal displays:

Tag number

NZL412

[01/08/08 : 240kg : SALFNYY123]

+2.12kg/day

STATS DETAILS

Last weight, including date and traits   Weight gain
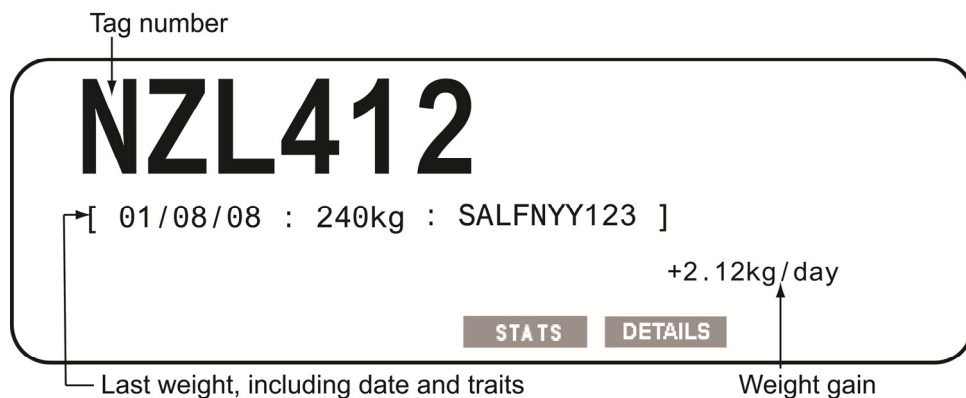
Note: If the ADG Display is turned to OFF in User Options, the weight gain, last recorded weight, either Trait or user entered note data, will not be displayed on the screen.

Note: If the weight gain statistics screen is displayed prior to an animal stepping on the platform, when the weight locks, the animal's weight gain will be displayed on the lower screen along with the Electronic or Visual Identification number, Condition Score and Note.

To view the statistics for the session **press and hold** the ▢ STATS ▢ soft key.   The statistics displayed are:

- Weight statistics screen - if drafting is disabled.

- Draft by weight screen - if drafting by weight is enabled.

Note: Draft by list statistics are shown once the animal has left the weighing platform.

To view the trait record information in the same layout as it was originally entered, press and hold the ▢ DETAILS ▢ soft key.

10. If the weight has locked on but you want to re-weigh the animal, press the green weigh key. The Weigh Scale re-weighs the animal and locks onto the weight again. The new weight replaces the original weight and the statistics are updated.

    For example, if the animal was not completely on the weighing platform, the Weigh Scale may have locked onto an incorrect weight.

    You do not need to re-enter the Visual Tag Number, condition score or note if you have re-weighed the animal.

11. Move the animal off the platform. The weight of the animal is recorded as soon as the animal leaves the platform (the weight decreases by 30% or more). At this point the record saves.   To further edit the Notes and Condition Scores you have to use the process outlined in *Editing weight records* (p 77).

    The weight remains on the screen until the next animal steps onto the platform.

    If the animal has left the platform and you want to delete the weight that has just been recorded, press the red delete button. The last weight entered

will be deleted from the Weigh Scale's memory and the following screen will display.

```
┌─────────────────────────────────────────┐
│              STATISTICS                   │
│         LAST WEIGHT DELETED               │
│                                           │
│                                           │
│                                           │
│                                           │
└─────────────────────────────────────────┘
```
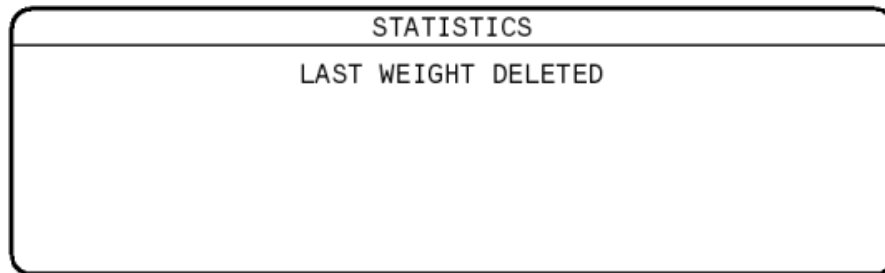
The creation date of the record is saved into the session file.

12. The Weigh Scale automatically zero's off any weight left on the platform (e.g. dirt or manure). When this has occurred the **ZERO** icon is displayed on the screen.

    If the **ZERO** icon does not display, press the blue zero button.

    The Weigh Scale does not need to return to zero before the next animal is loaded onto the platform.   Once the weight has dropped by 30%, the display will unlock ready for the next animal to be loaded onto the platform. This is a useful feature when weighing sheep.

13. Repeat the process from step 4 until all animals are weighed.

To edit the current session data, see *Editing a weight record in a standard or draft list session* (p 77).

Procedure for weighing static loads standard

1. Turn the mode select switch to **F** (Fine mode).
2. Follow the procedure outlined in Creating a new standard weighing session.
3. Ensure that the displayed weight is zero. To zero the Weigh Scale, press the blue **Zero** button.

    Note: The [ZERO] icon is not displayed in Fine mode.
4. Place the load onto the platform.
5. If you want to store information, enter desired values into the "Tag Number", "Condition Score" and "Notes" fields.

    > For example, you may want to enter a wool bale reference number or a note to identify specific bales.
    > Refer to the following table to select the field that you want to use. You can enter this information before the load is placed on the platform (i.e. when the platform is empty) or while the load is on the platform.

Field	What can be stored	How to use
Tag number (Reference number)	Up to 15 characters, alphabetic or numeric.	Use the keypad to enter the reference number.
Condition score	One or two digits.	Press the [SCORE] button on the keypad and type the score.
Notes	Up to 13 characters, alphabetic or numeric.	Press the [ENT] button on the keypad and type the note.

6. Press the green **Weigh** button, to record the weight.

    The statistics screen updates immediately. The weight screen does not update until the load is removed from the platform.
7. Move the load off the platform. The weight screen updates.
8. Repeat the procedure from Step 3 for subsequent items to be weighed.

At the end of the weighing session

1. Switch the Weigh Scale off by turning the mode select switch to the ⏻ position.
2. Disconnect the loadbar cables.
3. Fit the protective caps to the loadbar cables.
4. Fit the protective caps to the Weigh Scale.

Drafting by weight

To draft animals by weight you need to set up the following:

1. Connect the loadbar to the Weigh Scale.   See *Connecting the Weigh Scale to the loadbar.* (p 49)

2. Connect the Drafter to the Weigh Scale and set up the correct communications for the Drafter.   See *Communications* (p 28).

3. Set up drafting limits on the Weigh Scale.   See *Draft menu.* (p 14)

4. Create a standard session.   See *Creating a new standard weighing session* (p 51).

5. Weigh and draft the animals.

WEIGHING IN A TRAIT SESSION

Trait sessions allow you to record details of individual animals by entering values against various characteristics.   A Trait table is the template on which a Trait session is based.   They define which traits can be recorded in a session and the maximum number of characters in each. Trait tables are created in APS and copied to the Scale.

When you create a new Trait session on the Scale, you select from the displayed list.   You can customise the traits recorded or use breeder society values. Refer to the *APS User Manual* for further information.

Note:

- Up to ten trait tables can be stored on the Scale at any one time.

- When new Trait tables are copied to the Scale from APS, all existing Trait tables are overwritten.

- The TRAIT option is only available if Trait tables are stored on the Scale.

Creating a new trait weighing session

To create a new trait session there must first be a trait table present in the Weigh Scale. This must be copied from your computer using the APS program.

To create a new trait session, follow this procedure;

1. Turn the mode select switch to **A** (Automatic) or **M** (Manual).

2. Press the NEW soft key.

   The **NEW SESSION** screen displays:

   ```
              NEW SESSION

    Session Name:

             Enter a Session Name
          or select from options below


     CANCEL          TRAIT  DRAFTLIST    OK
   ```
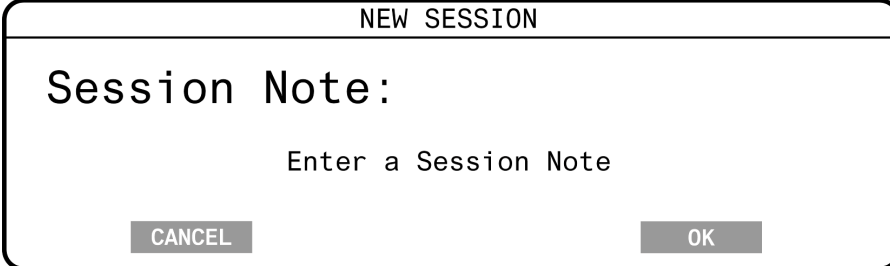
   The options for Trait or Draft List only show when there are such sessions present in the Scale:

3. Press the TRAIT soft key. The session name is automatically designated and cannot be changed.

   ```
          SELECT NEW TRAIT SESSION
    Trait Mature
    Trait Weaning
    Trait Yearling



        ▲      ▼           CANCEL     OK
   ```

4. Press the ▲ and ▼ soft keys to select the required trait table.

    Press **OK** to select the Trait table.

5. If prompted, type in a session note (can be left blank).

```
              NEW SESSION

  Session Note:

            Enter a Session Note


   CANCEL                          OK
```

The session note can be up to 13 alpha-numeric (including full stop, forward slash and space) characters long.

Press the ⬅ key to delete characters.

Press the **OK** soft key to save the note.

Note:

*   The APS software sets whether the **Session note** option displays on the Weigh Scale, via the *APS - Configure* menu.

*   Adding a session note reduces the number of records stored on the Weigh Scale by one.

*   The entered session note is transferred to APS with the session data.

*   The session note details are stored in the first record of the session file.

6. The Weighing Mode Setup screen will display.

    a) To change the default weighing mode, press the **CHANGE** soft key to select the weighing mode. See *User Options - Weighing Modes* (p 25) for more information.

    b) Press the **OPTION** soft key for advance options regarding the weighing mode.

7. Press **OK** to save the session.

    The new session is created and a statistics screen displays with all values set to zero.

The previous session is closed and stored in the Weigh Scale's memory and can be viewed using the Session menu.   See *Session menu* (p 17).

Procedure for weighing animals in a trait session

To weigh an animal in a trait session follow this procedure:

1. Select the weighing mode that you want to use by turning the mode select switch to **A** (automatic) or **M** (manual).

    When the Weigh Scale is switched on, the previous weighing session is still the current session. You can choose to create a new Trait session, see *Creating a new trait weighing session* (p 59).

2. If required, you can enter an ear tag prefix for the animals being weighed. See *Setting the tag prefix* (p 49) for further details.

3. Check that the ZERO icon is displayed. If it is not displayed, press the blue "zero" button to zero off any weight (e.g. dirt or manure) left on the platform.

4. Load the animal onto the platform. Ensure the animal is contained on the platform (e.g. no hooves off the platform and no one holding the animal).

5. If required, you can record the animal's Visual Tag Number or scan an Electronic ID.

    - **Using Electronic IDs:**

        Scan the animal's Electronic ID.

        The Electronic ID can be scanned at any time before or while the animal is on the platform.

        If you are using Electronic ID numbers only, the last 4 digits of the tag number preceded by a colon (:) displays on screen.

        If you entered a Visual Tag Number the first time the Electronic ID was scanned, the Visual Tag Number displays on screen.

        If this is the first time you have scanned the Electronic ID and you want to enter an associated Visual Tag Number, you can enter it now. In future, each time you scan the Electronic ID, the associated Visual Tag Number will display on screen.

        See *Using Electronic IDs* (p 34) for further details.

    - **Using Visual Tag Numbers:**

        Use the keypad to enter the Visual Tag Number. Up to 15 characters, alphabetic or numeric, can be entered.

        If an incorrect Visual Tag Number is entered, press ⬅ to delete each incorrect character. Re-enter the correct tag number.

        The Visual Tag Number can be entered at any time before or while the animal is on the platform.

        When the Visual Tag Number is entered, the date and any note or trait entered, the last time the animal was weighed displays on the screen.

        Note: Please ensure that the **ADG Display** is enabled in the **User Options** menu if you want to see the weight gain, last recorded weight, trait record and notes which were recorded during a previous weighing session. If this option is not switched **ON** when you scan an EID, the

previous note, either trait or user entered note data, will not be displayed.

6. If you want to view the most recent trait record, recorded for this animal in more detail, press the ▢DETAILS key. When this key is released, the display will revert to the previous screen.

7. If the trait table is not already displayed, press the ▢ENT key to display it.

```
┌─────────────────────────────────────────────────┐
│ :4135                              +2.82kg/day    │
│                                                    │
│      BREED     .. _        BRAND    .. _ _        │
│      SEX       .. _        ULTRA    .. _ _        │
│      BIRTH     .. _                               │
│      REGIMENT  .. _ _                             │
│                                                    │
│       ▼          ▲          ◀          ▶          │
└─────────────────────────────────────────────────┘
```

Note: The animal's Electronic ID or Visual Tag Number displays in the top left corner of the trait table. The weight gain, if one can be calculated for this animal, displays in the top right corner of the trait table.

8. The cursor flashes in the field adjacent to the first trait label. The number of characters able to be entered against each label is indicated by the blank underlines. Use the arrow soft keys to navigate between the traits and enter the values for this animal.

Note: Pressing the ▢ENT key alternates the display between the Visual Tag Number entry screen and the trait table. You cannot return to the statistics or weight record screens until the weight is removed from the Weigh Scale.

9. Follow the instructions for the weighing mode you have selected.

- **Automatic Mode**   When the Weigh Scale has determined an accurate weight for the animal, it locks on to the weight and holds it on the screen. The time taken to lock on to the weight varies depending on the movement of the animal.

- **Manual Mode**   Press the green weigh button to start weighing the animal. When the Weigh Scale has determined an accurate weight for the animal, it locks on to the weight and holds it on the screen. The time taken to lock on to the weight varies depending on the movement of the animal.

10. When the Weigh Scale has locked onto the weight:

- the "Weight OK" light illuminates;

- **OK** displays on the screen;

- the Weigh Scale beeps;

If drafting is turned on, the gate number displays indicating the drafting category.

If available on the Weigh Scale, the last recorded weight for the identified animal displays:

Tag number

NZL412

[01/08/08 : 240kg : SALFNYY123]

+2.12kg/day

STATS

Last weight, including date and traits   Weight gain
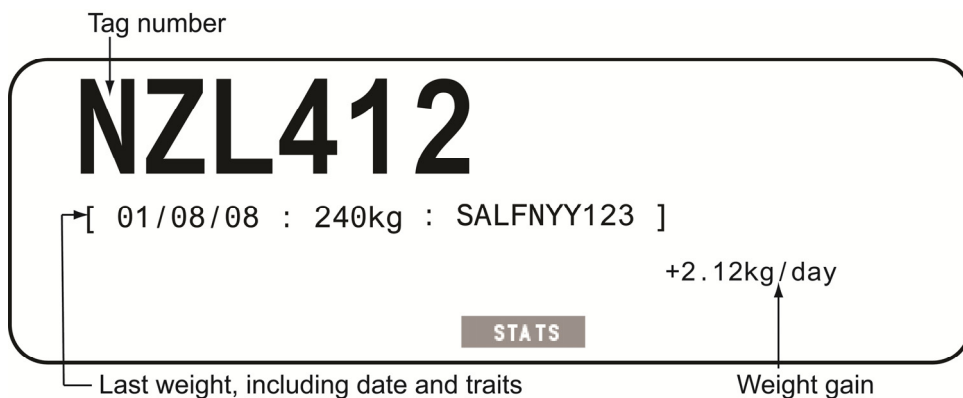
Note 1: The note will be displayed if there are no prior trait sessions for the animal, otherwise the note will only be displayed until the last trait record is found.

Note 2: If the ADG Display is turned to OFF in User Options, the weight gain, last recorded weight, and previous note, either Trait or user entered note data, will not be displayed on the screen.

To view the statistics for the session **press and hold** the STATS soft key. The statistics displayed are:

- Weight statistics screen - if drafting is disabled.

- Draft by weight screen - if drafting by weight is enabled.

Note: Draft by list statistics are shown once the animal has left the weighing platform.

11. If the weight has locked on but you want to re-weigh the animal, press the green weigh key. The Weigh Scale re-weighs the animal and locks onto the weight again. The new weight replaces the original weight and the statistics are updated.

For example, if the animal was not completely on the weighing platform, the Weigh Scale may have locked onto an incorrect weight.

You do not need to re-enter the Visual Tag Number, condition score or note if you have re-weighed the animal.

12. Move the animal off the platform. The weight of the animal and the traits will be recorded as soon as the animal leaves the platform (the weight decreases by 30% or more). The weight record screen displays the details of the record just created.

(1)	TAG	WEIGHT	Trait Mature
	125	302	CL24U8
	138	287	TL89R9
	149	312	_ _
▼	▲	PREFIX	NEW	SCREEN

If the animal has left the platform and you want to delete the weight that has just been recorded, press the red delete button. The last weight record,

including the traits, will be deleted from the Weigh Scale's memory and the statistics updated. The following screen displays.

```
                    STATISTICS
            LAST WEIGHT DELETED

              PRESS GREEN KEY
                TO REWEIGH

```
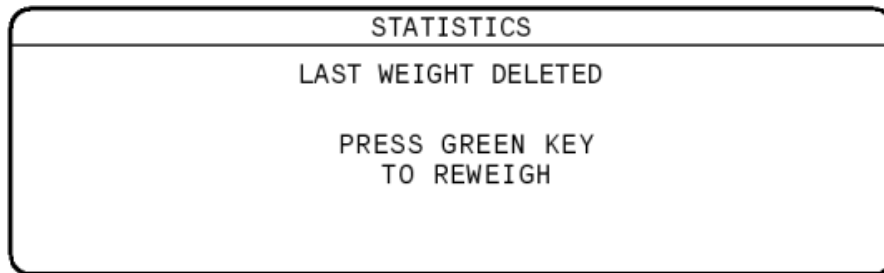
The ┌─────────┐ key has no function in a trait session.
     │ SCORE   │
     └─────────┘

The creation date of the record is saved into the session file.

13. The Weigh Scale automatically zero's off any weight left on the platform (e.g. dirt or manure). When this has occurred the **ZERO** icon is displayed on the screen.

If the **ZERO** icon does not display, press the blue zero button.

The Weigh Scale does not need to return to zero before the next animal is loaded onto the platform.   Once the weight has dropped by 30%, the display will unlock ready for the next animal to be loaded onto the platform. This is a useful feature when weighing sheep.

14. Repeat the process from step 4 until all animals are weighed.

To edit the current Trait session data, see *Editing a weight record from a Trait session* (p 78).

Procedure for weighing static Trait loads

1. Turn the mode select switch to **F** (Fine mode).
2. Follow the procedure outlined in *Creating a new trait weighing session* (p 59).
3. Ensure that the displayed weight is zero. To zero the Weigh Scales, press the blue **Zero** button.

   Note: The ZERO icon is not displayed in Fine mode.
4. Place the load onto the platform.
5. To record trait values, press ENT to display the Trait table.

   Note: The Trait fields displayed depend on the trait table selected when you created the session.
6. Enter the values into the "Trait" fields adjacent to the relevant labels.
7. Press the green **Weigh** button, to record the weight.

   The statistics screen updates immediately. The weight screen does not update until the load is removed from the weighing platform .
8. Remove the load from the platform. The weight screen updates.
9. Repeat the procedure from Step 3, for subsequent items to be weighed.

   To edit the entered Trait details see *Editing a weight record from a Trait session* (p 78).

At the end of the weighing session

1. Switch the Weigh Scale off by turning the mode select switch to the ⏻ position.
2. Disconnect the loadbar cables.
3. Fit the protective caps to the loadbar cables.
4. Fit the protective caps to the Weigh Scale.

WEIGHING WHILE DRAFTING BY LIST

What is a Draft List?

The Draft List enables farmers to identify, using its Electronic ID, a specific group of animals to be drafted off during a session.

A Draft List is a session file created on the computer with a particular naming format that identifies it when it is copied to the Weigh Scale.

During a Draft List session you can:

- weigh and draft animals, or

- only draft animals.

The results of the Draft List session are recorded in the Draft List.

The Draft List can be copied to and from the Weigh Scale using APS.

Setting up the Draft List

The Draft List is created on the computer and copied to the Weigh Scale using APS.   Refer to the *APS User Manual* for instructions on creating the Draft List and copying it to the Weigh Scale.

When a Draft List is copied to the Weigh Scale it replaces any Draft List that already exists on the Weigh Scale.

After you have completed your Draft List session you can copy the Draft List back to the computer for analysis or to update data in your farm management software program.

Drafting groups and drafting gates: At the time you prepare a Draft List in APS, you do not need to know which of the drafter's gates will be available for your purpose.   When you prepare the list, you simply assign animals to groups. After you copy the Draft List to the Weigh Scale, you decide which drafting group will pass through which drafter gate.

Outsiders: Outsiders are animals which:

- are not on the list;
- have no group number assigned to them in the list; or
- have no Electronic ID.

If an outsider passes through the drafter, the Weigh Scale assigns the animal to a special group called **Others**.   When you select a Draft List session, the Weigh Scale gives you the opportunity to assign a drafter gate specifically to the **Others** group.

Notes:

- If you draft by list without weighing, you cannot draft animals that are not wearing Electronic ID tags.   If you encounter such an animal, plan on having to manually shift it out of the drafter.
- If you are weighing as you draft by list and you encounter an animal not wearing an Electronic ID tag, the Weigh Scale will draft the animal through the gate you assigned to the Others group.   In this case, as the Weigh Scale cannot record an Electronic ID, you should add additional animal information, at least the animal's Visual Tag Number.
- If your Draft List contains more than 600 animals, an additional "SEARCHING" screen displays during drafting while the Weigh Scale locates the required records.
- Drafting can be turned off at any time by pressing the F3 soft key.

Connecting the equipment

Before you begin a draft list session follow these steps:

1. Connect the automatic drafter to Port 1 on the Weigh Scale.

2. Connect the Electronic ID reader to Port 2 or via Bluetooth on the Weigh Scale.

3. Ensure **Tag Checking** is turned **OFF**.   See *Tag checking* (p 27).

4. Configure both ports.   See *Communications* (p 28).

5. Ensure you have selected the draft list and set the gates for drafting.   See *Selecting the Draft List and setting gates* (p 69).

Selecting the Draft List and setting gates

To select a Draft List session, complete the following steps:

1. Turn the mode select switch to **A** (Automatic) if loadbars are connected or **M** (Manual) if you are not weighing.

2. Press the [NEW] soft key.

   The **NEW SESSION** screen displays.

   ```
   ┌─────────────────────────────────────────┐
   │           NEW SESSION NAME               │
   │  Session Name:                           │
   │                                          │
   │         Enter a Session Name             │
   │       or select from options below       │
   │                                          │
   │   [CANCEL]        [TRAIT][DRAFTLIST][OK] │
   └─────────────────────────────────────────┘
   ```

3. Press the DRAFTLIST softskey.

4. The **NEW SESSION** screen displays

   ```
   ┌─────────────────────────────────────────┐
   │              NEW SESSION                 │
   │  Session Name:  Draft List               │
   │                                          │
   │                                          │
   │                                          │
   │   [CANCEL]                     [OK]      │
   └─────────────────────────────────────────┘
   ```

5. Press [OK].

   Note: The session name cannot be changed.

6. Set the required gates for each displayed draft group.
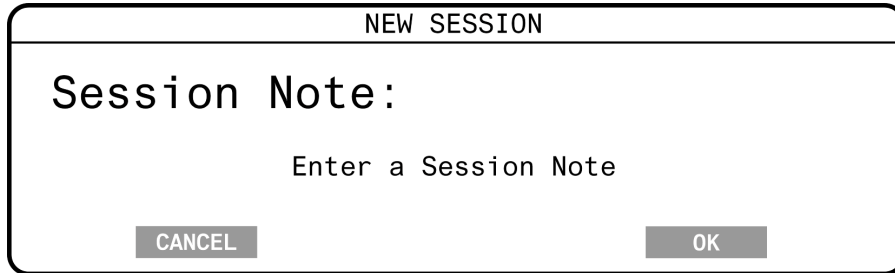
   Press the [▲] or [▼] soft keys, to select the required draft group.

   Use the keypad to set the required gate number(s).

   ```
   ┌─────────────────────────────────────────┐
   │     Session Name : Draft List            │
   │     Others  .. Gate 7                     │
   │     Group 1 .. Gate 1                      │
   │     Group 2 .. Gate 2                      │
   │     Group 3 .. Gate 3                      │
   │     Group 4 .. Gate 4                      │
   │     [ ▼ ][ ▲ ]              [OK]          │
   └─────────────────────────────────────────┘
   ```

7. Press [OK], to save the Draft list session details.

   Note: You do not need to change the draft limit, as it is not used during a draft list session.

8. If prompted, type in a session note (can be left blank).

```
               NEW SESSION

  Session Note:

              Enter a Session Note


     CANCEL                        OK
```

The session note can be up to 13 alpha-numeric (including full stop, forward slash and space) characters long.

Press the ⬅ key to delete characters..

Note:

- Adding a session note reduces the number of records stored on the Scale by one.

- The entered session note is transferred to APS with the session data.

The APS software sets whether the **Session note** option displays on the Scale.

- The session note details are stored in the first record of the session file.

9. Press   OK , to save the session.

The new session is created and a statistics screen displays with all values set to zero.

The previous session is closed and stored in the Scale's memory and can be viewed using the Session menu. See *Session menu* (p 17).

Procedure for weighing and drafting animals by Draft List

This section of the manual outlines the procedure to follow to weigh animals and draft them by list. You can also enter a note or condition score for each animal.

1. Select the weighing mode that you want to use by turning the mode select switch to **A** (Automatic) if loadbars are connected or **M** (Manual) if you are not weighing.

   When the Weigh Scale is switched on, the previous weighing session will still be the current session.   See *Selecting the Draft List and setting gates* (p 69).

2. If required, you can enter an ear tag prefix for the animals being weighed. See *Setting the tag prefix* (p 49) for further details.

3. Check that the **ZERO** icon is displayed. If it is not displayed, press the blue "zero" button to zero off any weight (e.g. dirt or manure) left on the platform.

4. Load the animal onto the platform. Ensure the animal is contained on the platform (e.g. no hooves off the platform and no one holding the animal).

5. Scan the animal's Electronic ID.

   The Electronic ID can be scanned at any time before or while the animal is on the platform.

   If you are using Electronic ID numbers only, the last 4 digits of the tag number preceded by a colon (:) displays on screen.

   If you entered a Visual Tag Number the first time the Electronic ID was scanned, the Visual Tag Number displays on screen.

   If this is the first time you have scanned the Electronic ID and you want to enter an associated Visual Tag Number, you can enter it now. In future, each time you scan the Electronic ID, the associated Visual Tag Number will display on screen.

6. As soon as the Electronic ID has been read:
   - the gate number displays next to the weight (upper screen).
   - the date and any note or trait entered the last time the animal was weighed is displayed on the screen.

7. If you want to view the most recent trait record, recorded for this animal in more detail, press the **DETAILS** key. When this key is released, the display will revert to the previous screen.

8. If you want to record a Note for this animal, press the ⌈ENT⌉ key. The cursor displays and you can enter notes between the > < symbols. You can enter up to 13 characters.

:**7359**

▶ CULL ◀

9. If you want to record a Condition Score for this animal, press the ⌈SCORE⌉ key. You can enter a 1 or 2 digit value.

:**7359**   ⌈12⌉

▶ CULL ◀

Note: Both the ⌈ENT⌉ and the ⌈SCORE⌉ keys enable you to switch between either of the values that you have entered.

10. When the Weigh Scale has determined an accurate weight for the animal, it locks on to the weight and holds it on the screen.

11. The time taken to lock on to the weight varies depending on the movement of the animal.

12. When the Weigh Scale has locked onto the weight:

- the "Weight OK" light illuminates;

- **OK** displays on the screen;

- the Weigh Scale beeps;

If drafting is turned on, the gate number displays indicating the drafting category.

If available on the Weigh Scale, the last recorded weight for the identified animal displays:

Tag number   Condition score

NZL412   ⌈99⌉

[LAST = 30/08/2006 : 240kg : HEALTHY]
▶NEW NOTE HERE◀   +2.12kg/day
                    STATS

Last weight, including date   Weight gain
and note

Note: If the ADG Display is turned to OFF in User Options, the weight gain, last recorded weight, and previous note, either Trait or user entered note data, will not be displayed on the screen.

To view the statistics for the session **press and hold** the [**STATS**] soft key.   The statistics displayed are:

- Weight statistics screen - if drafting is disabled.

- Draft by weight screen - if drafting by weight is enabled.

Note: Draft by list statistics are shown once the animal has left the weighing platform.

13. Drafting by list, the statistics update in the following way: When an animal on the draft list is seen, the Actual Total column (**Act Total**) will increase by 1 and the Expected Total (**Exp Total)** column will decrease by 1. If the animal was not on the draft list the Actual Total column increases by 1, but the Expected Total column does not change.

The same occurs for the Actual (**Act**) or Expected (**Exp**) totals for the draft group the animal belongs to.

Note:

The **Exp Total** column records the total number of animals on the draft list that are yet to be seen.

Number of animals drafted so far through the gate assigned to group 1

Number of animals listed to be drafted in group 1

```
(Q)                (D)  DRAFT  STATS
                        Group  0      1      2
                        Exp    0      5 ↵    15
                        Act    2      3 ←┘    1
                        Exp Total    46 ←
                        Act Total     9 ←
              [ ► ]         PREFIX   NEW   SCREEN
```

Total number of animals drafted so far through all gates

Total number of animals listed to be drafted

14. If the weight has locked on but you want to re-weigh the animal, press the green weigh key. The Weigh Scale re-weighs the animal and locks onto the weight again. The new weight replaces the original weight and the statistics are updated.

For example, if the animal was not completely on the weighing platform, the Weigh Scale may have locked onto an incorrect weight.

You do not need to re-enter the Visual Tag Number, condition score or note if you have re-weighed the animal.

15. Move the animal off the platform. The weight of the animal is recorded as soon as the animal leaves the platform (the weight decreases by 30% or more). At this point the record saves.   To further edit the Notes and

Condition Scores you have to use the process outlined in *Editing weight records* (p 77).

The weight remains on the screen until the next animal steps onto the platform.

If the animal has left the platform and you want to delete the weight that has just been recorded, press the red delete button. The last weight entered will be deleted from the Weigh Scale's memory and the following screen will display.

```
┌─────────────────────────────────────────┐
│               STATISTICS                │
│          LAST WEIGHT DELETED            │
│                                         │
│                                         │
│                                         │
└─────────────────────────────────────────┘
```

The creation date of the record is saved into the session file.

16. The Weigh Scale automatically zero's off any weight left on the platform (e.g. dirt or manure). When this has occurred the ZERO icon is displayed on the screen.

   If the ZERO icon does not display, press the blue zero button.

   The Weigh Scale does not need to return to zero before the next animal is loaded onto the platform.   Once the weight has dropped by 30%, the display will unlock ready for the next animal to be loaded onto the platform. This is a useful feature when weighing sheep.

17. Repeat the process from step 4 until all animals are weighed.

Note: Drafting can be turned off at any time by pressing the F3 key.

Drafting by list without weighing

To draft animals by list, without weighing, follow these steps:

1. Disconnect loadbars. Turn the mode select switch to **M** (Manual).

2. Scan the animal's Electronic ID.

    After the animal's Electronic ID has been read the draft gate is displayed on the main Weigh Scale screen. If you have an automated drafter connected and configured, the designated gate will open.

    Although it is not visible on the Weigh Scale, the session records the fact that this animal was drafted. The draft result for each animal can be viewed in APS, once the session has been copied back to the computer.

    When drafting by list the statistics update in the following way. When an animal on the draft list is seen, the Actual Total column (**Act Total**) will increase by 1 and the Expected Total (**Exp Total)** column will decrease by 1. If the animal was not on the draft list the Actual Total column increases by 1, but the Expected Total column does not change.

    The same occurs for the Actual (**Act**) or Expected (**Exp**) totals for the draft group the animal belongs to.

    Note:

    The **Exp Total** column records the total number of animals on the draft list that are yet to be seen.

Number of animals drafted so far through the gate assigned to group 1

Number of animals listed to be drafted in group 1

(Q)		(D) DRAFT STATS		
		Group 0	1	2
		Exp 0	5	15
		Act 2	3	1
		Exp Total	46	
		Act Total	9	
►		PREFIX	NEW	SCREEN

Total number of animals drafted so far through all gates

Total number of animals listed to be drafted
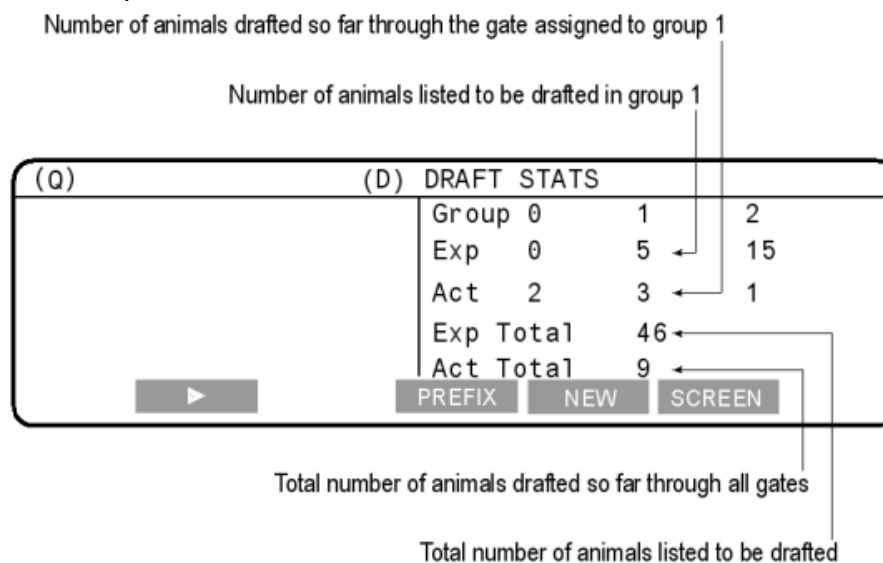
The Weight Stats screen does not appear.

3. Repeat Step 2 for each subsequent animal that you want to draft.

Note: Drafting can be turned off at any time by pressing the F3 key.

At the end of the weighing session

1. Switch the Weigh Scale off by turning the mode select switch to the ⏻ position.
2. Disconnect the loadbar cables.
3. Fit the protective caps to the loadbar cables.
4. Fit the protective caps to the Weigh Scale.

EDITING WEIGHT RECORDS

About editing weight records

- Only records in the current session can be edited on the Weigh Scale. To edit records in other sessions you need to copy them to the computer. Refer to the *APS User Manual* for more information.

- The Tag Number, Condition Score and Notes can be edited during or after a standard session.

- Trait table data can be edited in the current session.

- Weights cannot be edited.

- Weight records cannot be edited while viewing the session in setup mode.

Editing a weight record in a Standard or Draft List session

In a standard or draft list session;

1. Turn the mode select switch to **A** or **M**.

   Note: You must have loadbars connected to edit the weight records in the current session.

2. Press ⬛SCREEN until the screen listing the individual weights is displayed.

3. Press ⬛EDIT to edit weigh records.

(EDIT MODE)	TAG	WEIGHT	CON	NOTES
	149	564.0	9	IA 27/08
	138	486.0	9	IA 25/08
	125	414.0	7	IA 25/08

   ▲ ▼ ▶   OK

4. Use the arrow soft keys to highlight the data you wish to alter.

5. Press the ⬅ button to delete characters, as required.

6. Type in the new data using the keypad.

7. When you have made all the required changes, press ⬛OK to save the changes and exit edit mode.

Editing a weight record in a Trait session

In a Trait session;

1. Turn the mode select switch to **A** or **M**.

2. Press `SCREEN` until the screen listing the individual weights is displayed.

3. Press `EDIT` to edit weigh records.

```
┌──────────────────────────────────────────────┐
│ (EDIT MODE)    TAG      WEIGHT      Trait Mature │
│                                                 │
│                249     563.0                    │
│               [128]    436.0                    │
│                122     314.0                    │
│                                                 │
│          [ ▲ ] [ ▼ ] [ ▶ ]          [ OK ]      │
└──────────────────────────────────────────────┘
```

4. Use the arrow soft keys to highlight the Tag data you wish to alter.

5. Press the ⬅ button to delete characters, as required.

6. Type in the new Tag number using the keypad.

7. Use the arrow soft keys to highlight the Trait data you wish to alter.

   When you highlight the Trait data field the trait data screen displays.

```
┌──────────────────────────────────────────────┐
│ (EDIT MODE)                         Trait Mature │
│         BCS .._                                 │
│     WET-DRY .._                                 │
│    PERF GRP .._                                 │
│    DISPOSAL .._ _                               │
│      [ ▲ ] [ ▼ ] [ ▶ ] [ ◀ ]        [ OK ]      │
└──────────────────────────────────────────────┘
```

8. Type in the required information in the appropriate fields and press `OK` .

9. When you have made all the required changes, press `OK` to save the changes and exit edit mode.

Deleting a weight record in the current session

1. Turn the mode select switch to **A**, **M** or **F**.

2. Press   **SCREEN**   until the screen listing the individual weights is displayed.

3. Press   **EDIT**   to edit weigh records.

```
(EDIT MODE)    TAG       WEIGHT        Trait Mature

                249       563.0
                128       436.0
                122       314.0

          ▲        ▼        ▶             OK
```

4. Use the arrow soft keys to highlight the weight record you wish to delete.

5. Press the red **Delete** button.

   The selected record is deleted from the session and the statistics are updated.

RECORDING ANIMAL INFORMATION WITHOUT WEIGHING

The Weigh Scale W810 v2 lets you record details about animals against animal tags (electronic or visual) without needing to record a weight. The information is added to the current session (Standard only) in the same way as a normal record, but with the weight set to zero.

Note: Only records that contain a weight are added to the session statistics.

Automatic storing of Electronic IDs

You can use the Weigh Scale in a hands-free mode, to record the Electronic IDs for a group of animals. The Electronic IDs are stored in the current session. This can be used, for example, as a method of recording which animals arrived or left your farm on a particular day. In this case, it is recommended that you start a new standard session before storing the Electronic IDs.

The procedure for storing Electronic IDs automatically is:

1.   Make sure there are no loadbars connected to the Weigh Scale W810 v2.

2.   Turn the mode select switch to **A**.

3.   Read each Electronic ID.

Each Electronic ID is stored in a separate record in the current session. The weight is set to zero. The session statistics do not change. A count of scanned Electronic IDs displays next to the tag field. This will recount tags that are scanned for a second or subsequent time in the same session.

Note: If the Weigh Scale's cross-reference table already stores a Visual Tag Number linked to an Electronic ID you have read, the weight record on the Weigh Scale will display the Visual Tag Number, not the Electronic ID. When you copy the session to the computer, both the Electronic ID and Visual Tag Number will be visible.

Assigning Visual Tag Numbers to Electronic IDs

In the current Weigh Scale session, you can assign a Visual Tag Number to an Electronic ID once.   To change an assigned Visual Tag Number in the Weigh Scale's cross-reference table, you must transfer the cross-reference table to APS.

To assign a Visual Tag Number to an Electronic ID:

1. Make sure there are no loadbars connected to the Weigh Scale W810 v2.

2. Turn the mode select switch to **M**.

3. Scan the Electronic ID.

4. Enter the Visual Tag Number using the keypad and press the green **Weigh** button.

   The Visual Tag Number you entered is now linked to the Electronic ID in the Weigh Scale's cross-reference table.
   A record is added to the current session containing the Visual Tag Number and with the weight set to zero. The session statistics are unchanged.

For information on editing weight record in the current session, see *Editing weight records* (p 77).

Generally, the Visual Tag Number is assigned to the Electronic ID

• during the normal weighing process, or

• via the tag bucket file.

Note: Copying a Session file from the computer to the Weigh Scale will always update the Cross Reference Table in the Weigh Scale for any animals contained in that Session. This will be regardless of the date that the weighing Session was conducted. If multiple sessions are copied, the most recent session that each animal appeared in will be that animal's new record in the Weigh Scale's Cross Reference Table.

Recording standard animal information

To store condition scores and notes about animals without recording a weight, follow these steps:

1. Make sure there are no loadbars connected to the Weigh Scale W810 v2.

2. Turn the mode select switch to **M**.

3. Ensure you are in a standard session (not a trait session). If you are not, you will need to start a new standard session. See Creating a new standard weighing session.

4. If you are using Electronic IDs to identify the animal, scan the animal's Electronic ID.

5. Enter the animal's Visual Tag Number using the keypad, if it is not already displayed.

    Note: If you read an Electronic ID that was already linked to a Visual Tag Number in the Weigh Scale's cross-reference table, it will be displayed and you will not be able to edit it.

6. Press $\boxed{\text{SCORE}}$ and enter a one or two digit condition score.

7. Press $\boxed{\text{ENT}}$ and enter the note (up to 13 characters) using the keypad.

8. Press the green **Weigh** button to save the record.

    A text record is added to the current session containing the information you entered and with the weight set to zero. The session statistics do not change.

None of the fields are compulsory (Electronic ID, Visual Tag Number, Condition Score or Note), however, you must enter some information before the record is saved. Normally, you will want to identify the animal (using the Electronic ID or Visual Tag Number) before saving information about the animal using the condition score or note.

Recording animal traits

The Weigh Scale W810 v2 lets you record values against animal characteristics for a specific animal tag number (electronic or visual) without needing to record a weight. The information is added to the current session in the same way as a normal record, but with the weight set to zero.

The traits against which you can record information for each animal are defined in APS and copied to the Weigh Scale. When you start a new trait session on the Weigh Scale you can select which trait table to base the session on which then becomes permanently associated with that session. This defines the traits you can enter data against in this session. Refer to the *APS User Manual* for more information.

To store animal trait information without a weight, follow these steps:

1. Make sure there are no loadbars connected to the Weigh Scale W810 v2.

2. Turn the mode select switch to **M**.

3. Ensure you are in a Trait session. If you are not you will need to start a new trait session. See *Creating a new trait weighing session* (p 59).

4. If you are using Electronic IDs, scan the animal's Electronic ID.

    If the Electronic ID is already linked to a Visual Tag Number in the Weigh Scale's cross-reference table, the Visual Tag Number displays briefly and is then replaced by the trait table.

    If the Electronic ID is not linked to a Visual Tag Number in the Weigh Scale's cross-reference table, you can enter one now (this is not compulsory). The Visual Tag Number, if you enter one, replaces the Electronic ID on the Weigh Scale's display.

5. If you are using Visual Tag Numbers only, enter it now. The Visual Tag Number is displayed as you enter it.

6. If the trait table is not already displayed, press $\boxed{\text{ENT}}$ to display it now. Enter the trait data using the keypad. The number of characters available for each is indicated by the blank underlines.

7. Press the green **Weigh** button to save the record.

    The animal information you entered is added to the current session as a new record with the weight set to zero. The session statistics do not change.
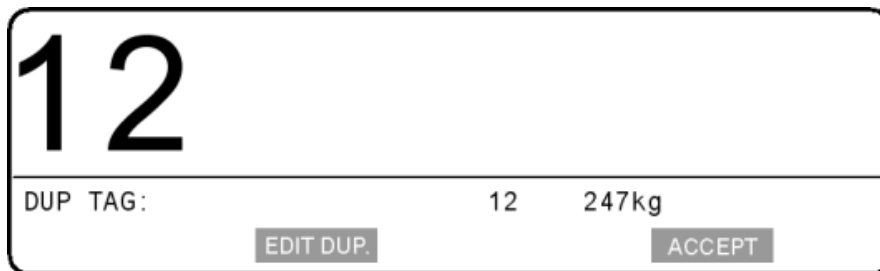
CHECKING FOR DUPLICATE VISUAL TAG NUMBERS

The Weigh Scale lets you check for duplicate Visual Tag Numbers during a weighing session. Duplicates can occur if the same animal is weighed twice in a session. They can also occur because a Visual Tag Number has been entered incorrectly. In this case, you can edit the incorrect Visual Tag Number immediately. For instructions on turning Tag Checking on and information about when a duplicate can occur, see User options.

If a Visual Tag Number duplicate occurs within a session, a screen similar to the following displays. The duplicate Visual Tag Number is displayed and the Weigh Scale beeps three times.

This duplicate tag screen enables you to:

*   accept both Visual Tag Numbers (i.e. the duplicate remains), or
*   edit the Visual Tag Number just entered, or
*   edit the Visual Tag Number recorded earlier in the session.

Notes:

*   If you do not make a selection before the animal leaves the platform the duplicate Visual Tag Numbers remain.

*   Some Electronic ID readers can be set up so that they are unable to read the same Electronic ID twice in a session.   If you want to use the Weigh Scale's tag checking feature to prevent an animal being weighed more than once in a session, you need to set up the reader so that it can read the same Electronic ID more than once.

*   To prevent multiple recordings of an Electronic ID, the Weigh Scale records the number once after the first reading.   It will not record this Electronic ID again until after a different Electronic ID has been read.

Editing a duplicate Visual Tag Number

If a duplicate Visual Tag Number occurs, the following screen will be displayed and the Weigh Scale will beep three times.
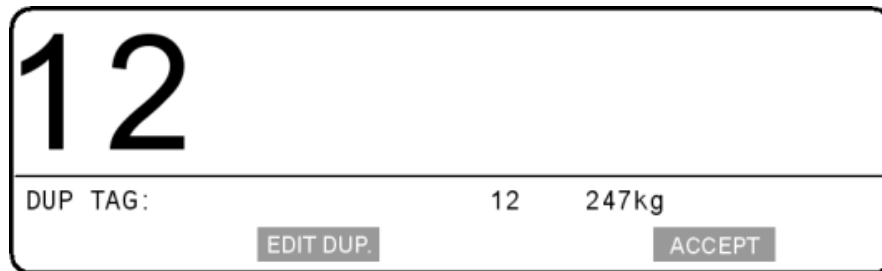
This screen lets you change the current Visual Tag Number or the Visual Tag Number that was entered earlier in the session.

To change the current Visual Tag Number:

1. Use the backspace key ⬅ to delete the Visual Tag Number. If the Visual Tag Number is linked with an Electronic ID, pressing ⬅ deletes the entire number. If the Visual Tag Number isn't linked with an Electronic ID, pressing ⬅ deletes one digit.

2. Use the keypad to enter a new Visual Tag Number.

To change the Visual Tag Number that was entered earlier in the session:

1. Press the EDIT DUP. button.

2. Use the backspace key ⬅ to delete the Visual Tag Number. If the Visual Tag Number is linked with an Electronic ID, pressing ⬅ deletes the entire number. If the Visual Tag Number isn't linked with an Electronic ID, pressing ⬅ deletes one digit.

3. Use the keypad to enter a new Visual Tag Number.

Accepting duplicate Visual Tag Numbers

If you do not want to change either of the duplicate Visual Tag Numbers, press the ACCEPT button.

The lower screen will display the Visual Tag Number just entered and you can continue with the usual weighing process.

In this case, two records in the current session will contain the same Visual Tag Number.

Updating the Cross-Reference Table with Tag Checking

When a duplicate tag number occurs and you change a Visual Tag Number that is already linked to an Electronic ID, the cross-reference table in the Weigh Scale, as well as the current session, is automatically updated.

For more information about the Weigh Scale's cross-reference table or about linking a Visual Tag Number to an Electronic ID, see *Using Electronic ID* (p 34).

The following procedure provides an example of how duplicate tag number checking can be used to update the Weigh Scale's cross-reference table:

1. In different sessions you read two Electronic IDs. By mistake you assign both the same Visual Tag Number of 500. The cross-reference table in the Weigh Scale records this information as shown below.

Electronic ID	Visual Tag Number
90000000555	500
90000000444	500

2. You start a new session and read the first Electronic ID (90000000555). Later in the session you read the second Electronic ID (90000000444). The duplicate tag number screen displays with the Visual Tag Number 500 displayed.

3. You realise the Visual Tag Number linked with Electronic ID 90000000444 should be 600 not 500.

    To correct the mistake, you press the ⬅ soft key to delete the 500 and use the keypad to enter the correct Visual Tag Number of 600.

    When the animal leaves the platform the current session and the cross-reference table are automatically updated. The cross-reference table now records the information shown below.

Electronic ID	Visual Tag Number
90000000555	500
90000000444	600

ADDITIONAL FEATURES

Zero tracking

As animals pass through the weighing crate, an accumulation of mud and dung may build up on the weighing platform.   The Weigh Scale can compensate for the weight of this accumulation by subtracting it from the total weight.   The automatic subtraction of the residual weight from the total weight is called zero tracking.

Zero tracking ensures that the Weigh Scale captures the animal's weight and not the mess left on the platform.

The way zero tracking is initiated depends on the weighing mode.

Automatic and Manual modes

In the Automatic and Manual weighing modes, zero tracking is automatically implemented if, after the animal leaves the weighing platform, the residual weight is within a defined zero tracking range.

* If the residual weight is within the defined range, the   **ZERO**   icon displays.

* If the residual weight is outside the defined range, the icon does not display. To manually compensate for the residue, press the blue zero button.   The **ZERO**   icon displays.

During a weighing session, if the Weigh Scale consistently does not restore to zero, check that there are no obstructions under or around the platform or crate.

Fine mode

In the Fine weighing mode, automatic zero tracking is disabled.

The   **ZERO**   icon does not display in the Fine weighing mode.

Memory full warning

The Weigh Scale can store up to 60000 records. This is a total of 60000 records across all weighing sessions, not just the current session.

When the record tally is 1000 records short of the limit, the Weigh Scale beeps and a memory full warning displays. The warning displays again 50 short of the limit accompanied by three beeps. When the record tally is only 20 short of the limit, the warning displays and three beeps sound each time a new record is added.

When the record tally reaches 60000, the Weigh Scale beeps four times and will not accept any more records.

To continue weighing, switch the Weigh Scale to Set Up mode and use the Session Menu screen to select and delete a previous session.

Before deleting a session, you can also copy the weighing sessions to a computer, so that you can keep a record of the data. Refer to the *APS User Manual*, for more information.

Printing

A serial printer can be attached to the Weigh Scale W810 v2. If the printer is connected during a weighing session, you can configure the Weigh Scale to print each animal's tag number, weight and condition score when the Weigh Scale locks on to the weight.

For instructions on printing weights at the end of the weighing session, or from a previous session, see *Session menu* (p 17).

Printing weights during a weighing session

To print each weight record during a weighing session, follow these steps.

1. Connect the printer cable to one of the two serial ports on the Weigh Scale.

2. Turn the mode select switch to **S** to display the setup menu.

3. Select **5. COMMUNICATIONS**.

    Ensure the port to which the printer is connected is set to **Printer**.   When the Weigh Scale case is open, Port 1 is on the top, left side of the Weigh Scale. Port 2 is directly below.
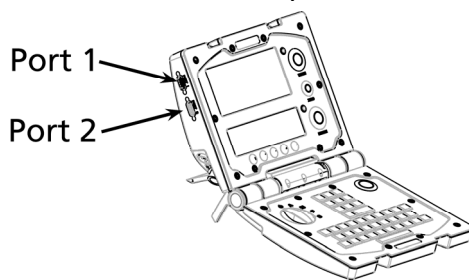
4. Press [OK] to return to the setup menu.

5. Select **4. USER OPTIONS** on the setup menu.

6. Ensure **LIVE PRINTING** is turned **ON**.

    Each time the Weigh Scale locks on to a weight, the following information prints.

    *   Visual tag number, or if none exists, the last four digits of the Electronic ID number preceded by a colon.

    *   Weight.

    *   Condition score.

    *   the drafting gate, if drafting is turned on.

Note: If in a trait session, trait information will not print and there will be no condition score.

Invalid Session EID's

EID's received during a session download from APS to the Weigh Scale are now validated to ensure they are in the correct numeric format. If an EID does not

pass the validation, the following error message is displayed on the lower screen of the Weigh Scale.

```
        Store Animal Weight
_____
            Invalid EID
          0000004ABCDEFABC
            in session
        03/09/2007 STUD PDCK
```

To clear this message, turn the rotary dial to a different mode. e.g. Automatic, Manual, Fine, or Setup.

INTERFACING SOFTWARE: APS

Animal Performance Software (APS) is software that can be run on a personal computer.   After a connection has been made between the computer and the Weigh Scale, APS can process information obtained from the Weigh Scale.

With APS you can:

- retrieve sessions from the Weigh Scale.

- copy sessions to the Weigh Scale.

- edit sessions.

- edit Electronic ID and Visual Tag Number links.

- prepare Draft lists.

- prepare trait tables.

- copy trait tables to the Weigh Scale.

- prepare session statistics more advanced than those displayed by the Weigh Scale itself.

- view animal weight-gain graphs across sessions.

- email sessions to selected recipients.

- change Weigh Scale setup

- create reports.

Detailed instructions are contained in the *MyScale Pro User Manual*.

LOADBAR AND PLATFORM OPTIONS

It is recommended that you use Gallagher Loadbars with the Weigh Scale W810 v2.

The Weigh Scale W810 v2 Scale recognises most commonly available Loadbar sets. To connect to some Loadbar sets, adapter cables may be required.

If you are not using Gallagher Loadbars, a calibration check will be required prior to first use.

Gallagher Standard Loadbars

Features

- 2000 kg weighing capacity - Available in 600mm (23") and 1000mm (39") lengths
- Tough rugged steel loadbars
- Bottom feet mounting holes extend beyond top covers for ease of bolting down
- Slotted top mounting holes fit all sizes of platforms and crushes
- 6m (20') long tough loadbar cables fitted with high quality connectors
- Fully waterproof
- No rubber mounts

Talk to your Gallagher dealer about the best platform and/or crate for your requirements.

Gallagher Heavy Duty Loadbars

Features

- 3500 kg weighing capacity
- 1000 mm (39") rugged steel loadbars
- Bottom feet mounting holes extend beyond top covers for ease of bolting down
- 6 m (20') long tough loadbar cables fitted with high quality connectors
- Fully waterproof
- No rubber mounts
- High capacity load cells withstand large shock loads
- Heavy steel chassis construction absorbs the harshest of impacts
- Set them and forget them for permanent installation under large crushes.

Talk to your Gallagher dealer about the best platform and/or crate for your requirements.

Gallagher Super Heavy Duty Loadbars

Features

- 4500 kg weighing capacity
- 1000 mm (39") rugged steel loadbars
- Bottom feet mounting holes extend beyond top covers for ease of bolting down
- 6 m (20') long tough loadbar cables fitted with high quality connectors
- Fully waterproof
- No rubber mounts
- High capacity load cells withstand large shock loads
- Heavy steel chassis construction absorbs the harshest of impacts
- Set them and forget them for permanent installation under the largest crushes

Talk to your Gallagher dealer about the best platform and/or crate for your requirements.

Gallagher Heavy Duty Weigh Feet

Features

- 5000 kg weighing capacity
- High performance, high accuracy double ended sheer beam stainless steel loadcells
- Fifth loadcell supplied with kit
- Heavy duty stainless steel top and bottom mounting plates
- Offset holes in bottom plate for drilling in place
- Rodent and crush protectors on loadcell and loadbar cables
- Pre-wired waterproof junction box (terminate loadcells at time of installation)

Gallagher Suspension Load Cell 250 kg

Features:

- 250 kg capacity loadcells
- Replaces mechanical scale for hanging crates
- Compact sturdy design
- No rubber to delaminate or rot
- Spiral spring metal reinforced cable
- High quality moisture proof connectors

Gallagher Suspension Load Cell 500 kg

Features:

- 500 kg capacity loadcells
- Replaces mechanical scale for hanging crates
- Compact sturdy design
- No rubber to delaminate or rot
- Spiral spring metal reinforced cable
- High quality moisture proof connectors

SPECIFICATIONS

Weigh Scale W810 v2 Dimensions

	Metric	Imperial
Length	232 mm	9.25"
Width	212 mm	8.5"
Height	90 mm	3.5"
Weight	2 kg	4.4 lb

General

Operating Temperature	-20º to 50º C
	-5º to 120º F
Accuracy	± 1%
Environmental Protection Rating	IP65
Input Voltage	11 - 14 VDC

Not for Trade

This Weigh Scale is not certified "Legal for Trade".

Weight increments

For Gallagher Loadbar sets, the weight increments are preset as shown in the table. For other loadbar sets talk to your Gallagher dealer.

Weight Range	Gallagher Standard Loadbars (2000 kg)	Gallagher Heavy Duty Loadbars (3500 kg) and Gallagher Super Heavy Duty Loadbars (4500 kg)

Automatic or Manual modes:

0 - 49.9 kg	200 g increments	500 g increments
50 - 199.9 kg	500 g increments	500 g increments
200 - 499.9 kg	1 kg increments	1 kg increments
500 - 1999.9 kg	2 kg increments	2 kg increments
2000 - 4999.9 kg	Not Applicable	5 kg increments

Fine mode:

0 - 49.9 kg	100 g increments	200 g increments
50 - 199.9 kg	500 g increments	500 g increments
200 - 499.9 kg	1 kg increments	1 kg increments
500 - 1999.9 kg	2 kg increments	2 kg increments
2000 - 4999.9 kg	Not Applicable	5 kg increments

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT

This symbol on the product or its packaging indicates that this product must not be disposed of with other waste.   Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment.   The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.   For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.