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Pre-installation requirements

Electrical requirements:

- » The main control box, the SDL150 EID reader, and the air compressor all need a mains power supply. We recommend the air compressor be connected to a separate circuit on your electrical panel. An air compressor draws a significant amount of power which can affect the performance of the other components.
- » The Stock Recorder cradle and the weigher can be charged from the control box, but are also supplied with cables to connect to the mains supply if required.

Air pressure requirements:

- » The drafting crate gates are operated by air pressure of about 40 PSI. You will need an air compressor and enough air hose to connect the compressor to the control box.
- » Ice crystals in the air hoses can stop your drafting crate from working properly. For cold weather operation (below -10°C) ask your Shearwell representative for the best practice in your area.

Environmental requirements:

- » The crate must be installed on firm, level ground to get accurate weights. Provide a solid base about 3.5 metres (12') long by 1.2 metres (4') wide. The area should be level from front to back, and from side to side. Weigh something with a known weight, like a bag of feed, to check for accuracy after installation.
- » The crate should be installed in a location protected from the weather. Do not allow snow to accumulate on the unit. The electronic components (stock recorder and the weigh head) should be stored in a warm environment when not in use.
- » Connectors must have their covers and caps in place to keep out moisture when not in use.



Setting up the crate

Connect the SDL 150.

- » Attach the red power cable to the bottom of the SDL150 box into the outlet labeled “Power in”.
- » Connect the other end to a mains power supply.



Set the weigh head and the stock recorder into their mounting brackets.

- » Attach the two cables from the load bars to the ports on the bottom of the weigh head.
- » Connect the power lead to the centre port.
- » Connect the small end to the port on the control box marked Weigh Scale, or use the other charging cable to power the weigher directly from the mains supply.
- » For an X6 stock recorder connect the charging cable from the cradle to the mains.
- » For a Workabout Pro stock recorder connect the charging cable from the cradle to the port marked Stock Controller.



Plug the Main Control box into a power supply.

- Attach the heavy power lead to the connector above the air pressure gauge marked Mains.
- Push the rocker switch on the control box to the On position. The red light will come on.



Connect the air supply

- Attach an air line to the air fitting on the control box.
- Turn on the compressor. Be careful - the gates may move unexpectedly!



The fitting for the air hose is at the bottom left-side of the main control box. The gates may move once the air is hooked up. The unit must be supplied with a minimum of 40 PSI. Once connected this is regulated to a preset level by the main control box.

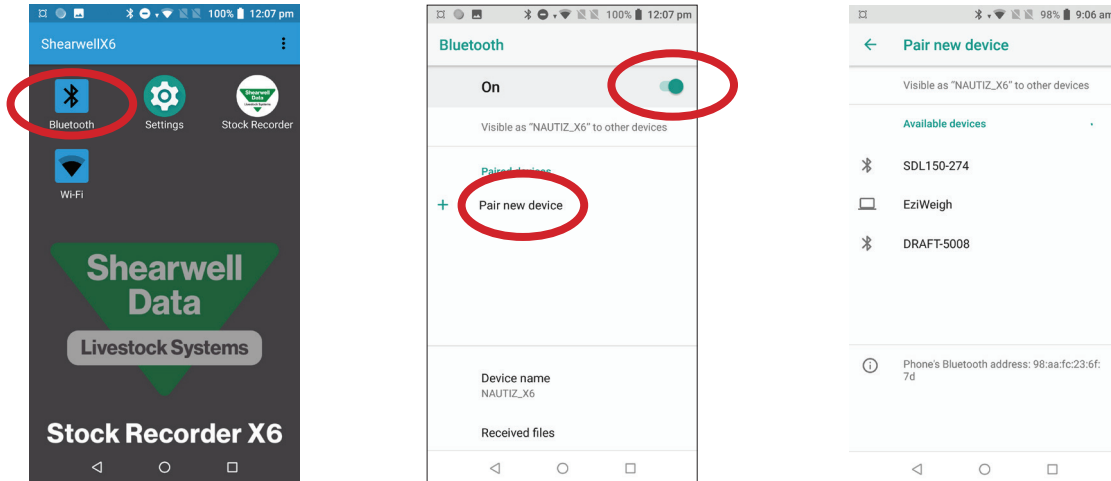


Light key:

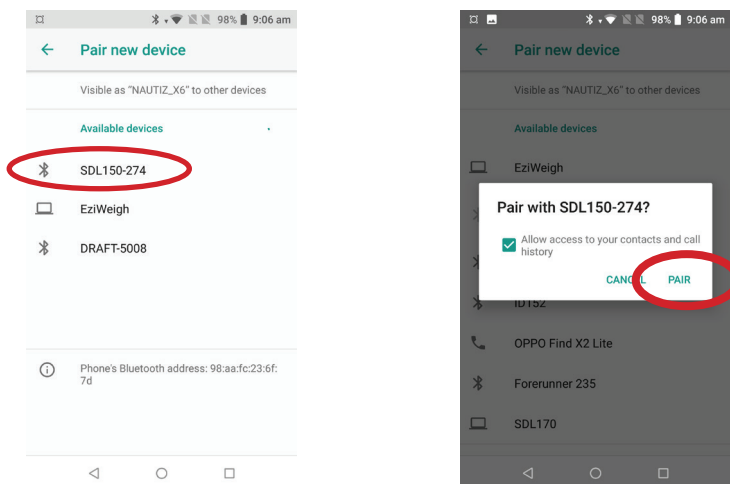
- Green light flashes when a tag is read.
- Red light glows when the power is on.
- Blue light glows when Bluetooth is connected.

Link to an X6 Stock Recorder

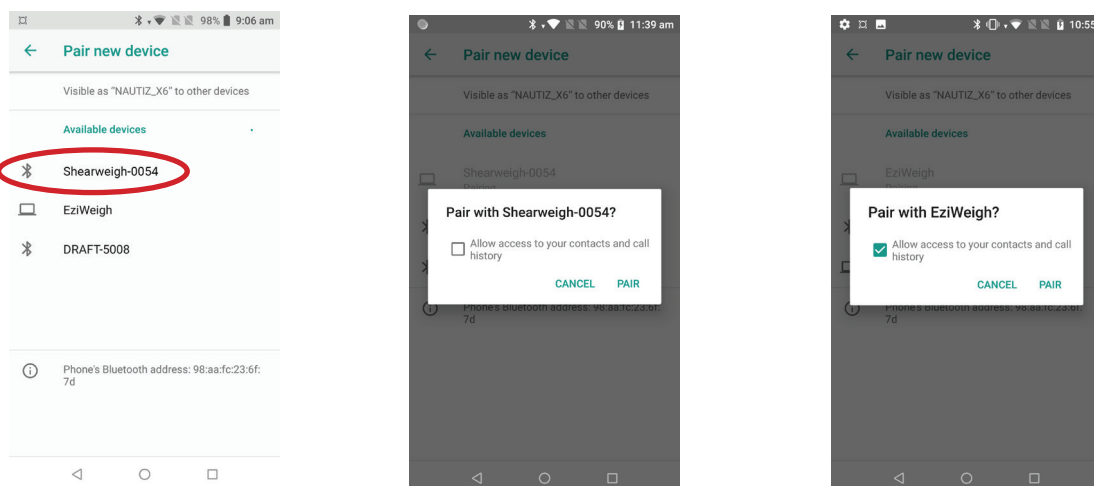
1. Make sure the crate, weigher and the EID reader on the crate are all powered on and close by.
2. Open the Bluetooth settings from the X6 home screen.
3. Make sure the Bluetooth is turned on.
4. Tap **Pair** new device to scan for the crate, weigher and EID reader.
5. The X6 will find the Bluetooth signals from every device in the vicinity.



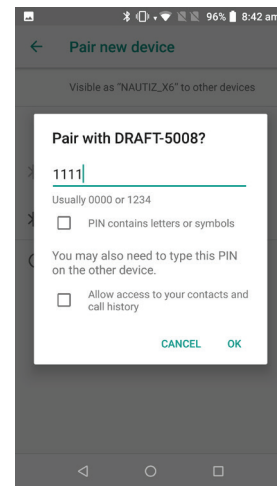
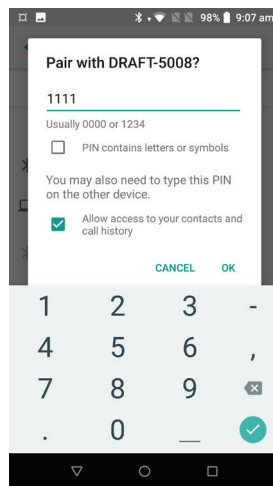
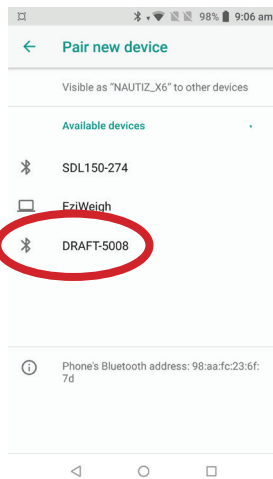
6. Tap the name of the EID reader - the name starts with SDL150_ Tap **Pair** to connect.



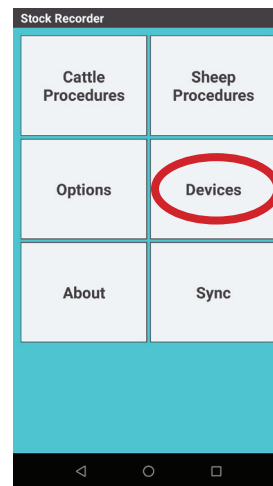
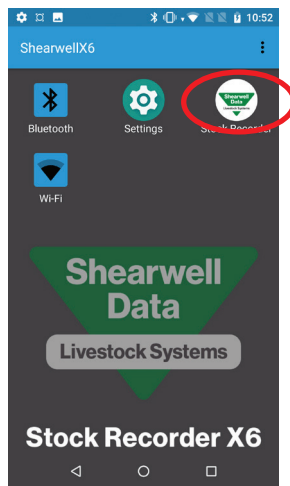
7. Tap the name of the weigh scale.
8. Tap **Pair**, then tap **OK** to connect to the weigher.



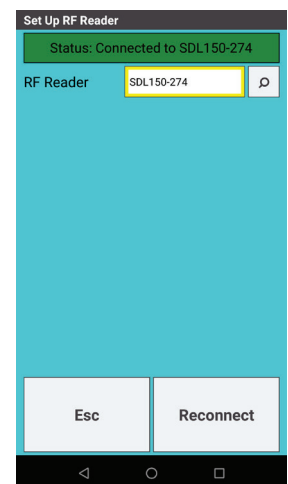
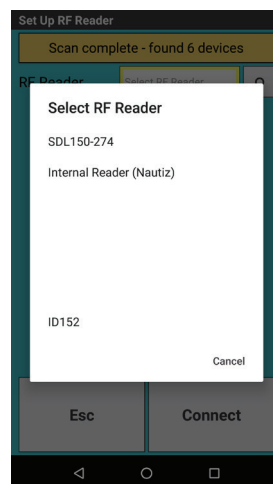
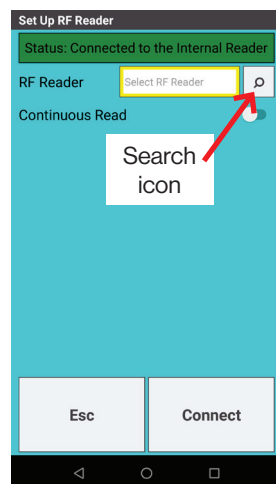
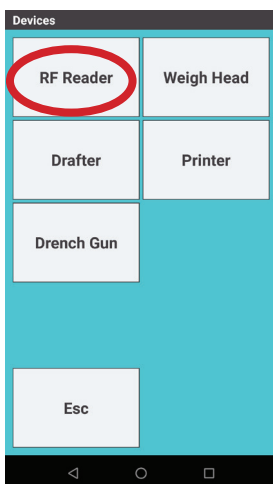
9. Tap the name of the drafting crate. A Shearwell crate name starts with DRAFT_. The passcode is 1111. Tap **OK** to connect.
10. All the components will now appear as paired. Close the Bluetooth settings.



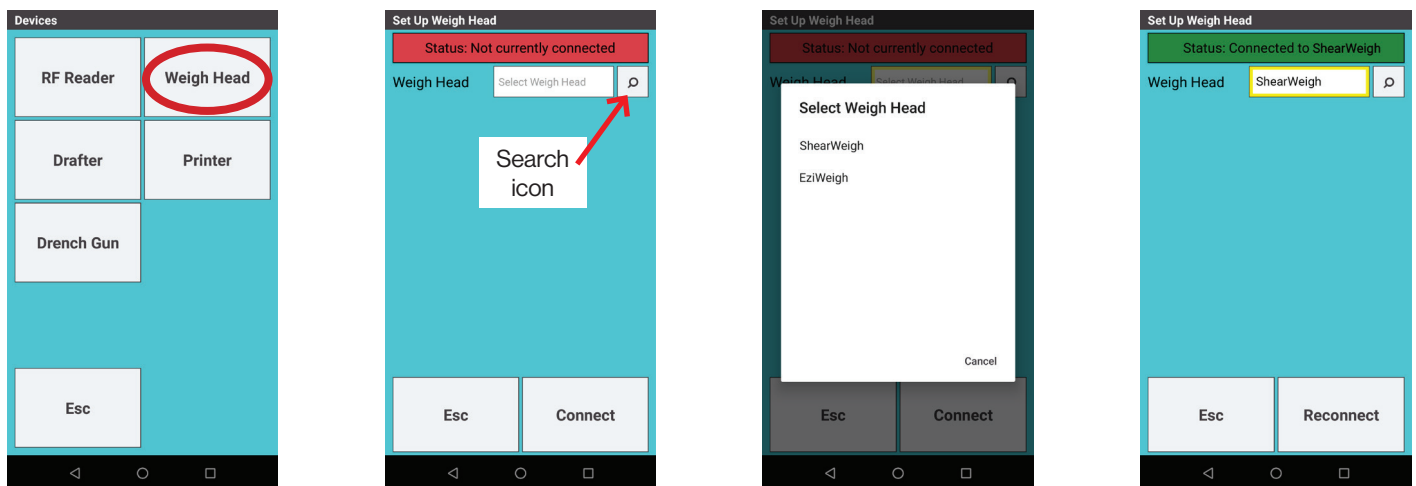
11. Open Stock Recorder. Tap **Devices**.



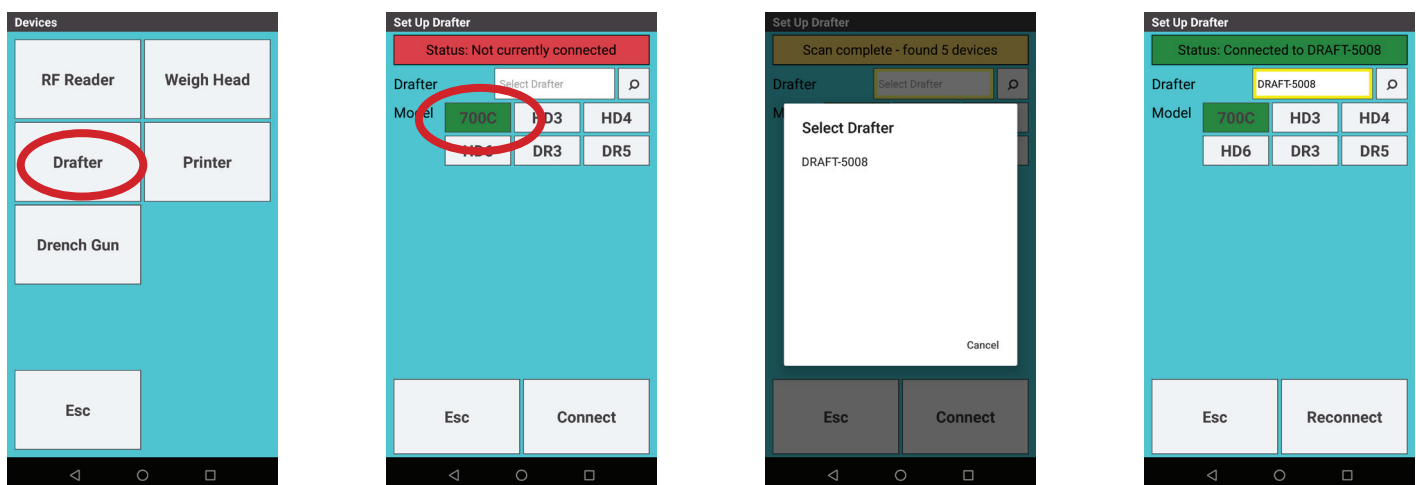
12. Tap **RF Reader**. Tap the Search icon to find the EID reader - the name starts with SDL150_
13. Select SDL150_ The X6 will connect to the EID reader and the status bar at the top of the screen will turn green and show it is connected. Tap **Esc**.



14. Tap **Weigh Head**. Tap the Search icon to find the weigher.
15. Select either ShearWeigh or EziWeigh. The X6 will connect to the weigher and the status bar at the top of the screen will turn green and show it is connected.



16. Tap Drafter. Select 700C. Tap the Search icon to find the drafter - the name starts with DRAFT_.
17. Select **DRAFT_**. The X6 will connect to the drafter and the status bar at the top of the screen will turn green and show it is connected.
18. Exit the Devices window and go to **Sheep Procedures** and the Drafting function.



This is the procedure for the first time you connect to a drafting crate. Once all the components have been paired by Bluetooth you can simply tap Reconnect for each device the next time you wish to use the auto drafter.

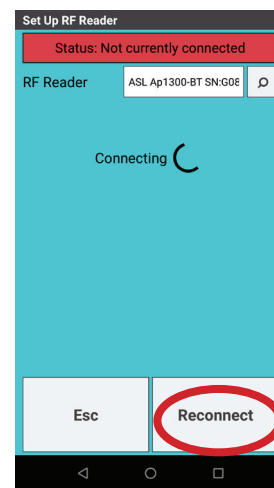
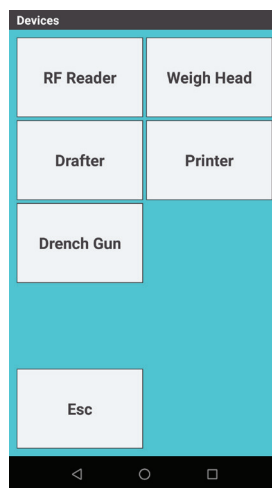
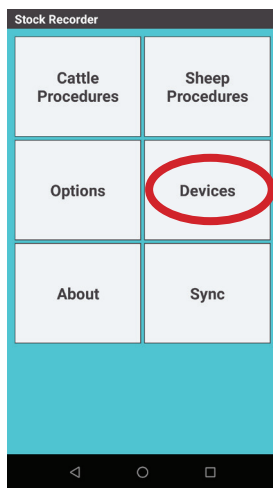
See **page 8** for instructions on using the Drafting function in Stock Recorder.

Operating the drafting crate

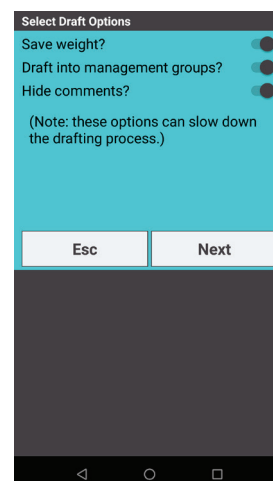
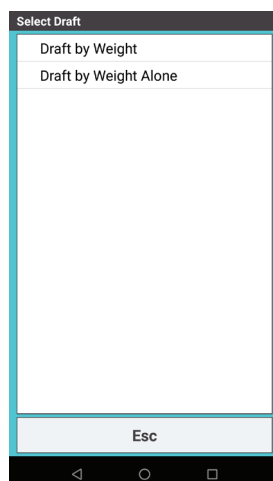
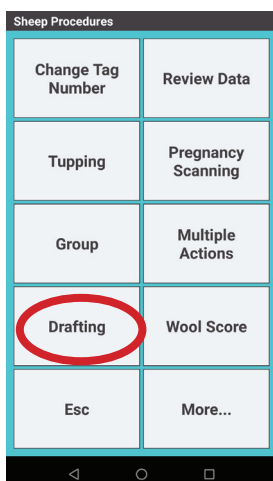
This is the procedure for using the stock recorder and auto drafter to weigh and sort animals based on their weight. If you want to draft animals based on other criteria, like sex or breed, or if you want to separate animals into special groups, then you must do that through a Drafting Setup in FarmWorks on the computer. See the FarmWorks User Guide for specific instructions on drafting setups.

Read the instructions for setting up the Bluetooth connections before starting. This section deals with the actual operation of the crate after the initial installation.

- » Open Stock Recorder on the X6
- » Tap **Devices**.
- » Open RF Reader, Drafter and Weigh Head and tap the **Reconnect** button on each.
- » Continue to **Sheep Procedures** then **Drafting**.



1. On the stock recorder go to **Sheep Procedures > Drafting**.
2. Select **Draft by Weight**.
3. You can choose to save the weight of each animal - **Yes** or **No**.
4. You can choose to save the drafted animals into management groups - **Yes** or **No**.
5. You can choose to hide comments, which means the comments set to show on the handheld are not shown to speed up drafting - **Yes** or **No**. Tap **Next**.



- Set the weight parameters and select the gates - Left (L), Right (R) or Forward (F). Tap **Next**.
- If you chose to save into management groups then you must type in a name for each group, or select from the dropdown list of existing groups. Tap **Next**.
- The in-gate (back gate) of the drafting crate will open for the first sheep to enter, and close behind it.
- The EID number will appear in the Tag field, the weight will show, the appropriate management group is named and an arrow shows the direction of the gate opening.

Draft Setup - Weight

Weight below	38.0	Kg →	Left
	38.0	to	43.0
	Kg →	Forward	
Weight above	43.0	Kg →	Right

Esc Next

Enter Management Groups

Left	Heavy	...
Forward	Feeders	...
Right	Light	...

Esc Next

7123 , . >

Drafting

Status: Awaiting Animal Reset

Tag: UK123456 00126 i

Weight: 26 Kg

Draft: Below 38.0 Kg

←
LEFT

Esc Manual

Draft by Weight Alone

This option does not read the EID tag and does NOT record any animal information. It only weighs and then drafts in three different directions depending on your weight parameters.

- On the stock recorder go to **Sheep Procedures > Drafting**.
- Select **Draft by Weight Alone**.
- Set the weight parameters and select the gates - Left (L), Right (R) or Forward (F). Tap **Next**.
- The in-gate (back gate) of the drafting crate opens for the first sheep to enter, and closes behind it.
- The weight will show, and an arrow shows the direction of the gate opening.

Sheep Procedures

Change Tag Number	Review Data
Tupping	Pregnancy Scanning
Group	Multiple Actions
Drafting	Wool Score
Esc	More...

Select Draft

Draft by Weight

Draft by Weight Alone

Esc

Draft Setup - Weight Alone

Weight below	38.0	Kg →	Left
	38.0	to	43.0
	Kg →	Forward	
Weight above	43.0	Kg →	Right

Esc Next

Drafting

Status: Awaiting Animal Reset

Weight: 57 Kg

Draft: Above 43.0 Kg

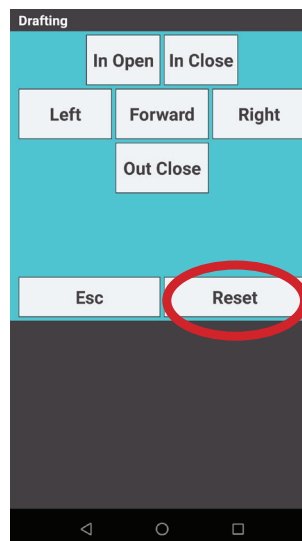
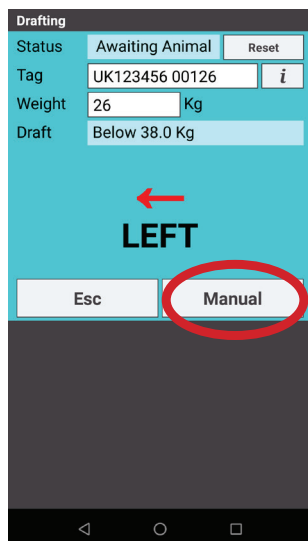
→
RIGHT

Esc Manual

Manual drafting with the stock recorder

Occasionally you may want to stop the auto drafter and operate the gates manually using the stock recorder. Note that if you are drafting into management groups, NO data will be recorded about an animal that is drafted manually. The 3-way drafter must have a Bluetooth connection to the stock recorder before starting.

1. On the stock recorder go to **Sheep Procedures > Drafting**.
2. Select any of the drafting options and prepare to draft.
3. There is an option to switch to **Manual** drafting at the bottom of the screen.
4. Use the buttons to open and close any of the drafting gates.
5. To revert to automatic drafting, tap **Esc**.



Using the remote control

The remote control can be used to operate the gates for manual drafting of animals. This can be done independently of the stock recorder, or used in conjunction with the stock recorder for recording treatments, movements, etc when animals are not being automatically drafted.

1. On the stock recorder, go to **Devices > Drafter**, and check the Drafter is not connected. If it is connected then flip the power switch on the control box to off, then back on again to break the Bluetooth link.
2. Connect the remote control to the Main Control box. The port is above the air line connection.
3. Use the four buttons to open the front, rear, left and right gates.



Trouble-shooting Guide

Problems with Bluetooth

- ▷ If the X6 stock recorder was switched off, in sleep mode or was moved out of range then it will lose the Bluetooth connections.
 - Make sure the X6 stock recorder is powered on and in range.
- ▷ Check that all cords and plugs are secure. If the power supply fails for even a second the Bluetooth connections will be broken.
- ▷ If none of these resolve the problem switch everything off, disconnect the mains and take the X6 out of the cradle.
 - Reconnect the mains and turn everything back on again.
 - Reboot the X6 stock recorder (press and hold the power button then press **Re-Start**). Wait for the X6 to reboot then open Stock Recorder.
 - Reconnect through the Devices screens on the stock recorder.
 - Go to RF Reader, search for the SDL150, press **Connect**.
 - Go to Weigh Head, search for the ShearWeigh or Eziweigh, press **Connect**.

Stock recorder is not receiving tag numbers

- ▷ Check the SDL 150 is connected and powered on. (Is the red light on?)
- ▷ Try a test tag. Does the green light flash?
- ▷ Go to **Devices > RF Reader** on the stock recorder. Select SDL 150. Press **Connect**.
- ▷ Switch off or remove other RF readers (stick readers, other panel readers, etc.)
- ▷ Move radios, fans, laptops, etc. away if they could interfere with the Bluetooth signal.

Stock recorder is not receiving weights.

Note: The stock recorder waits for a tag number to come in from the SDL 150 first before it accepts a weight from the weigher. If weights are not coming in from the weigher, first check that the tag reader is working properly before you assume the problem is with the weigher.

- ▷ Try a test tag. Does the tag number come up in the Tag field on the stock recorder? If not then reconnect the SDL 150 and try again.
- ▷ If the test tag number is received by the stock recorder then go to **Devices > Weigh Head** on the stock recorder. Select ShearWeigh or EziWeigh. Press **Connect**.
- ▷ Check the weigher is connected or has enough battery, and is powered on.

In-gate will not close

The in-gate (or back gate) closes when there is weight on the scale. If the in-gate can not close because of an obstruction, commonly by two sheep trying to enter together, the gate is programmed to try two times to close, then it stops to allow you to clear the obstruction.

- ▷ Check there is nothing preventing the gate from closing. Press **Reset**. The gate should now close when a weight is in the crate.
- ▷ If there are no obvious obstructions then check how quickly the gate is closing. If the gate is taking too long to close then it thinks there is a blockage. Check the compressor is running and there is enough air pressure to close the gate quickly enough.
- ▷ If there is no blockage and sufficient air pressure, then there may be a fault with either the sensor which detects that the gate is closed, or inside the drafting control box; contact your distributor.



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