

ELECTRIC AUTODRAFTER USER GUIDE

PAD 600 OPERATORS GUIDE



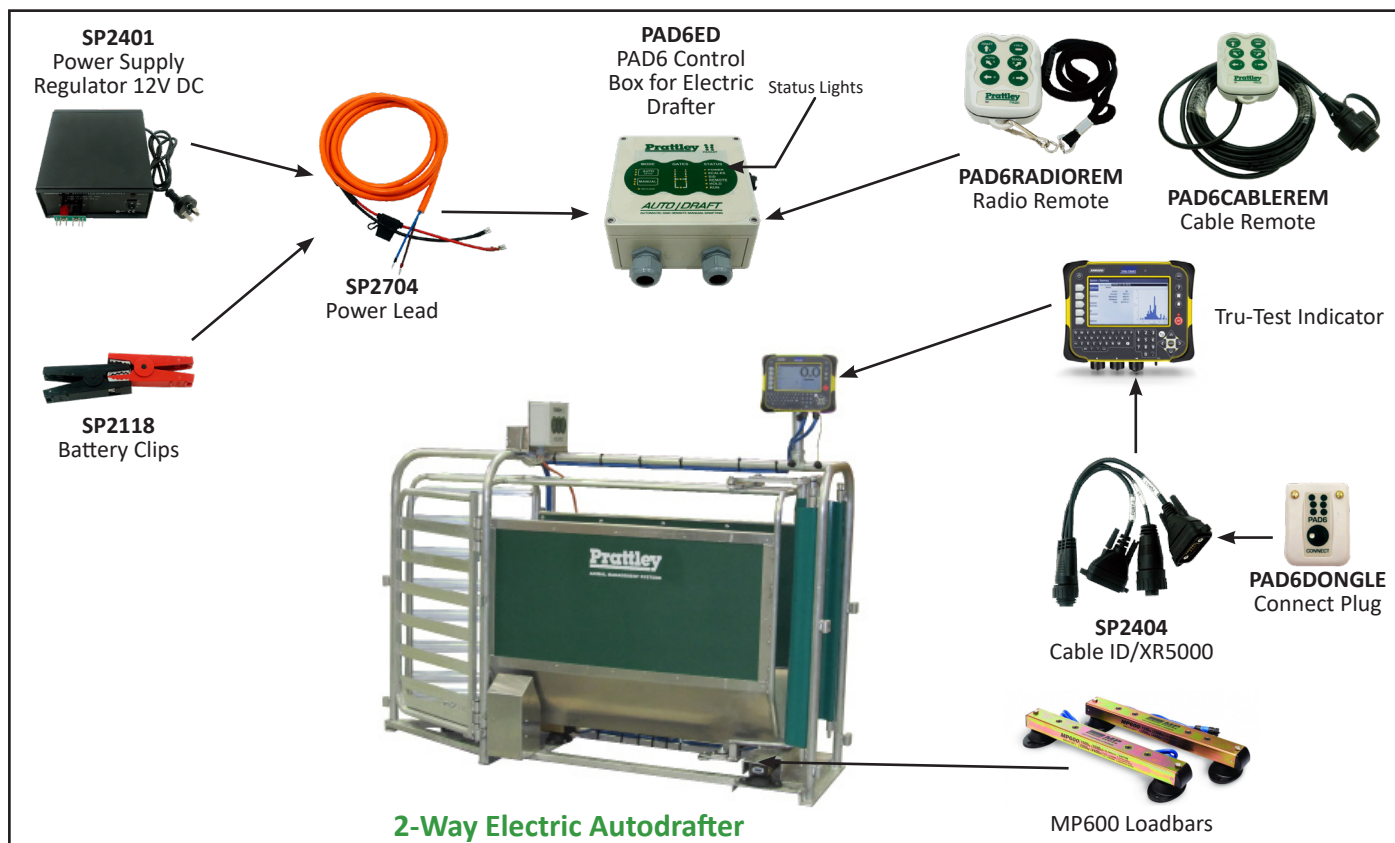
3-Way Electric Autodrafter



2-Way Electric Autodrafter

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QUICK TROUBLESHOOTING

AIR	POWER	DRAFTER	INDICATOR and EID reader
<ul style="list-style-type: none"> • Check Air Supply • Check Pressure regulator 	<ul style="list-style-type: none"> • Status POWER not lit? <ul style="list-style-type: none"> - Check Battery Clips, wires & Solenoid loom - Check mains supply to regulated DC - Check battery voltage - Check Inline fuse • Remote's LED not lit when button pressed? <ul style="list-style-type: none"> - Replace batteries 	<ul style="list-style-type: none"> • Status SCALES not lit? <ul style="list-style-type: none"> - Check Indicator switched on - Sync Scales Connect Plug • Gates INLET flashing? <ul style="list-style-type: none"> - Check Entry Gate is closed • Status HOLD lit? <ul style="list-style-type: none"> - Press DRAFT button, check drafting ranges and limits • Status REMOTE not lit? <ul style="list-style-type: none"> - Sync Radio Remote 	<ul style="list-style-type: none"> • Status SCALES flashing? <ul style="list-style-type: none"> - Enter a draft range, check drafting range & limits • No EID showing on indicator? <ul style="list-style-type: none"> - Try another eartag - Sync EID Connect Plug • No Lights on EID reader? <ul style="list-style-type: none"> - Check battery voltage. • Load bars connected?

NOTES

- Operation of each gate can be tested with the Remote when the the PAD6 control box is in MANUAL mode.
- An empty crate (zero weight) cancels the draft/weigh cycle. Accidentally leaning on the crate will not record a false weight or operate the drafting gates. When testing; Open Inlet, Apply Weight, Close Inlet.
- To pair the Radio Remote with the PAD6 control box, press the Setup button on the PAD6 twice, then press both buttons 2 & 3 on the Radio Remote (within 10 seconds), status REMOTE will light up. To pair the Scales to the PAD6 control box, press the setup button on the PAD6 twice, then press the connect button on the Scale Connect Plug, status SCALES will light up.
- If two sheep enter and the back gate then shuts, hold the HOLD button down and the rear gate will open, back one sheep out, then press AUTO button and drafter is reset to automatic drafting again.

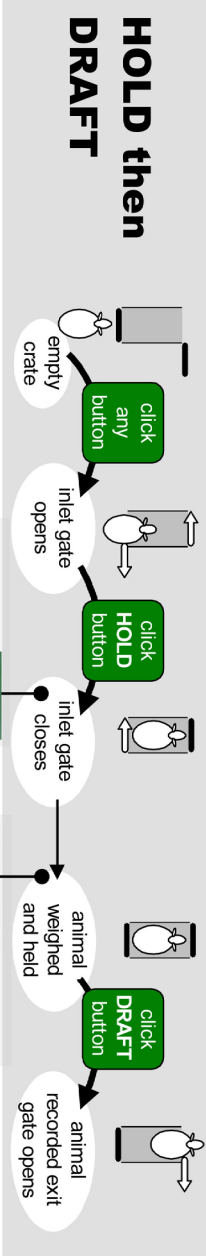
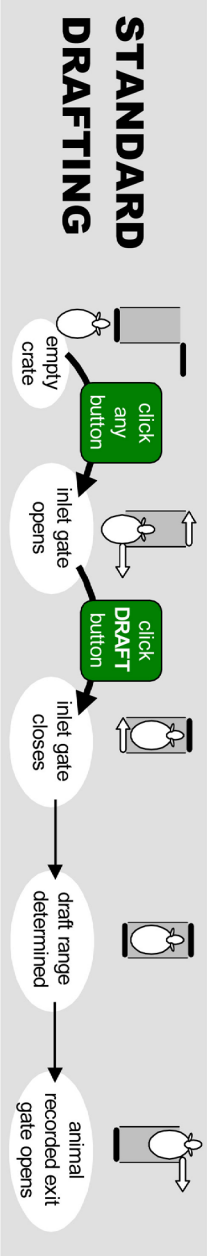
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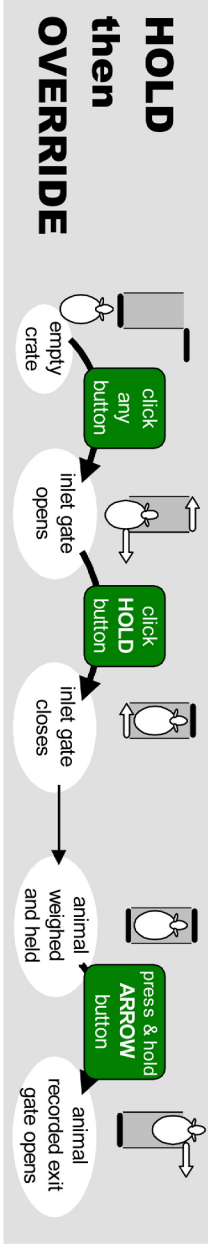
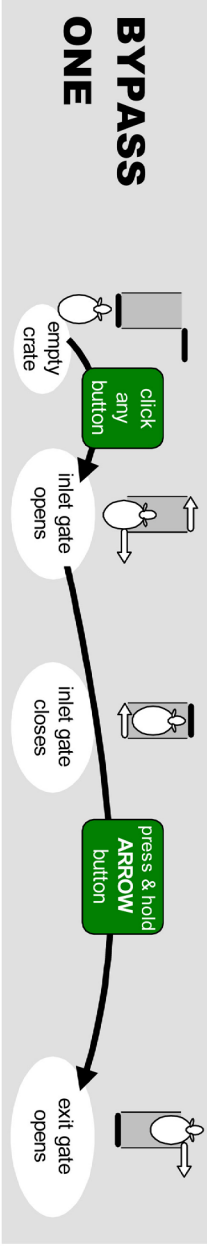
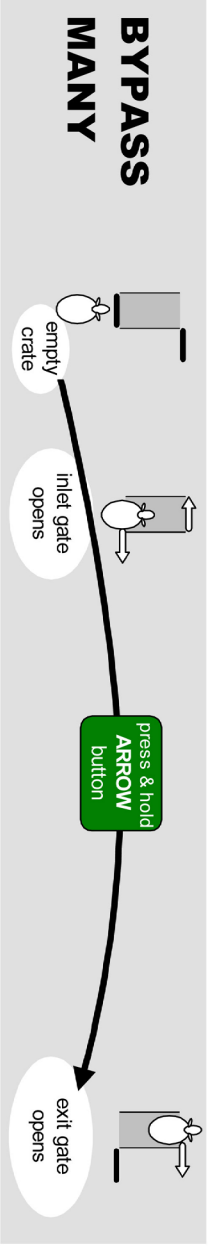
NOTES

1. **CANCEL a drafting cycle**
 - Click the same button again to open the inlet gate.
 - To bypass an animal already in the crate, click any button, then press & hold arrow button for desired exit direction.
 - The drafter will not release an animal while the inlet gate is open.
 - The **HOLD** button can be pressed at any time, before the animal is weighed, to enter the **HOLD** then **DRAFT** or **HOLD** then **VERRIDE** modes.

■ **AUTO Drafting** Click button to control inlet gate ¹



■ **BYPASS Drafting** Press and hold arrow button to control exit gates



GENERAL

V1.0b

The connection between the Prattley PAD6 drafter and the Tru-Test indicator is a short range wireless link. This replaces the cable used in previous models. Being wireless, there is a setup sequence to pair the PAD6 Connect Plug with the PAD6 drafter and also to the optional PAD6 EID connect plug.



PAD6 CONNECT PLUG

Features

- No cables to be damaged.
- Self powered from the Tru-Test indicator.
- Connects to PAD6 drafter and EID reader through the same CON port.
- Weather resistant when used with supplied rubber gasket.

TRU-TEST INDICATOR SETUP






Check that the indicator serial port CON1 is configured correctly.

- From the Weighing screen press: , , **SERIAL**
- Disable WEIGHT OUTPUT: (x)

If using the optional PAD6 EID connect plug to an EID panel reader

- Enable CON 1 INPUT: (✓) EID RS232 9600 bps
- Set CON 1 MIN CHARS: 15

Check the following settings in the Indicator:

- , **SYSTEM** WEIGHT RECORDING: Manual
- , **DRAFT** DRAFTING: (✓)
- Check the draft range settings. If using ICONS: Arrows with a three way drafter, use only the    arrows in the arrow column.
- Set the upper weight limit in the TO: column to something very high. Eg. The rating of the loadbars.

NOTE

Weight Output can be used as long as it is not on CON1.

With a short lead or 'plug saver' adapter, the PAD6 Connect Plug can also be used on CON2 – apply the CON1 settings to CON2

PAD6 CONNECT PLUG AND DRAFTER SETUP

To pair the PAD6 connect plug with the PAD6 drafter follow this sequence:

- Fit the PAD6 Connect Plug to CON1 of the Tru-Test Indicator. Use the supplied rubber gasket to obtain a weather resistant seal between the pins of the connector.
- Turn on the Tru-Test indicator, press ESC to go to the weigh screen
- Check the Tru-Test serial setup if needed.
- Connect power to the PAD6 drafter box.
- On the PAD6 drafter, release the 'keylock' by a double tap on either the Auto or Manual button.

Touch / Click the two devices to be paired:

- Touch the Auto/Setup button on the PAD6 drafter, then quickly (within 5 seconds)
- Click the Connect button on the PAD6 Connect Plug (fitted to the Indicator).

The LED on the PAD6 Connect Plug will blink a few times as setups are sent from the Drafter to the Indicator. The PAD6 drafter box Status panel will show SCALES and the PAD6 connect plug will blink approximately every five seconds.

NOTE

Pairing can be done in any order; clicking Connect then touching Setup will also work, or even both buttons at the same time if you can reach.

Only a short click (half a second) is required on the Connect Plug, holding the button for more than four seconds resets the plug.

If you have a PAD6 EID Connect Plug:

- Fit the PAD6 EID Connect Plug to the EID reader, and power up the reader.
- Click the Connect button on the PAD6 EID Connect Plug,
- Click the Connect button on the PAD6 Connect Plug (fitted to the Indicator)

The LED on the EID Connect Plug blinks approximately every two seconds.

NOTE

Pairing can be done in any order; clicking the Connect Plug on the Indicator then the EID Connect will also work, or even both buttons at the same time if you can reach.

Only a short click (half a second) is required on the EID Connect Plug, holding the button for more than four seconds resets the plug.

PAD6 RADIO REMOTE SETUP

To pair a Radio Remote with a Drafter, follow this sequence:

- Connect power to the PAD6 drafter box.
- On the PAD6 drafter, release the 'keylock' by a double tap on either the Auto or Manual button.
- Touch the Auto/Setup button on the PAD6 drafter, then quickly (within 5 seconds)
- Press both the left arrow(2) and right arrow(3) buttons together on Radio Remote.

The PAD6 drafter box Status panel will show REMOTE.

- Release the buttons on the Remote

NOTE

Pairing can be done in any order; while holding the left and right buttons down on the remote then touching the Setup button will also work.

HOW IT WORKS

- To allow for multiple drafters to work in the same area, each wireless device has a unique serial number that is used to address it.
- Touching Setup or Clicking the Connect Button starts an enquiry window where the device looks for another device that is also in enquiry. When another device is found the two exchange serial numbers and record these into permanent memory.
- Drafting information (eg. radio remote button, EID number, draft direction etc) along with the serial number is broadcast, and seen by all the devices within range, but only the device with the matching serial number - the intended recipient - responds to the information.

TROUBLE SHOOTING TIPS

- When the SCALES LED on the PAD6 drafter status panel is lit, the connect plug is working.
- When the SCALES LED on the PAD6 drafter status panel flashes slowly, it is waiting for the scales to determine a draft direction. – opening the drafter inlet gate cancels the weighing/drafting cycle. The SCALES LED should return to on.
- Connect loadbars to the Indicator or leave the drafter inlet gate open when pairing
- Make sure the keylock LED is off by double tapping AUTO or MANUAL – the same as double-click when using a computer.
- When touching the PAD6 drafter AUTO/SETUP and MANUAL buttons, make sure the LEDs beside the button light up. – power the drafter off then back on, or wait ten seconds for the touch buttons to re-calibrate.
- Try moving the Indicator slightly to change the relative position of the radios
- Try turning on the Tru-Test indicator before plugging in the Connect plug.

TRU-TEST SETUP SCREENS

Typical Setup Screens

Serial Setup

PRINTER OUTPUT: COM1 RS232 Xon/Xoff 9600 bps
 PRINT REPORT HEADING: Tru-Test 3000
 PRINTER TYPE: 48 COLUMN

WEIGHT OUTPUT: X

CON 1 INPUT: EID RS232 9600 bps
 CON 1 MIN CHARS: 15
 CON 2 INPUT: EID RS232 9600 bps
 CON 2 MIN CHARS: 15 SCP ADDRESS: 20

B.TOOTH MODEM

System Setup

DAMP SYSTEM: Superdamp III (Sheep)
 WEIGHT RECORDING: Manual DATE: 08/02/2008
 RESOLUTION: 0.5 TIME: 02:45
 SET TARE: 0.0 kg FONT: Original
 AUTO ZERO TRACK: On Net BACKLIGHT: Auto
 POWER UP ZERO: CONTRAST: 5
 AUTO POWER OFF: STARTUP SCREEN:
 REWEIGH SOFTKEY: X ID ENTRY CREATES FILE REC.:
 REVERSE WEIGHING: X DISABLE POPUPS: X
 SOUND: Standard

COUNTRY: NZ

Drafting Setup FILE: 5

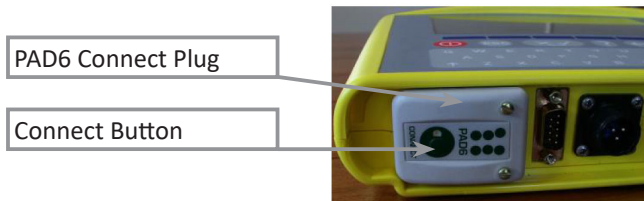
DRAFTING: DRAFTING RANGES: 3
 DRAFT BY: Weight ICONS: Large Arrows
 NO EID TIMEOUT: 0.0 NO EID DIRECTION:

RANGE	FROM	TO	ARROW
1	0.0	20.0	↑
2	20.5	40.0	←
3	40.5	1500	→

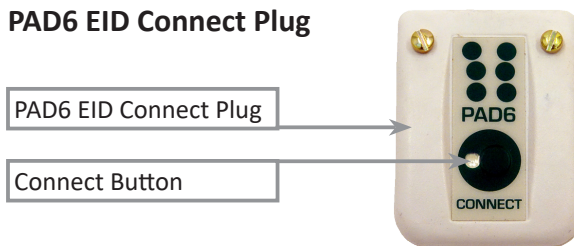
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PRATTLY COMPONENTS

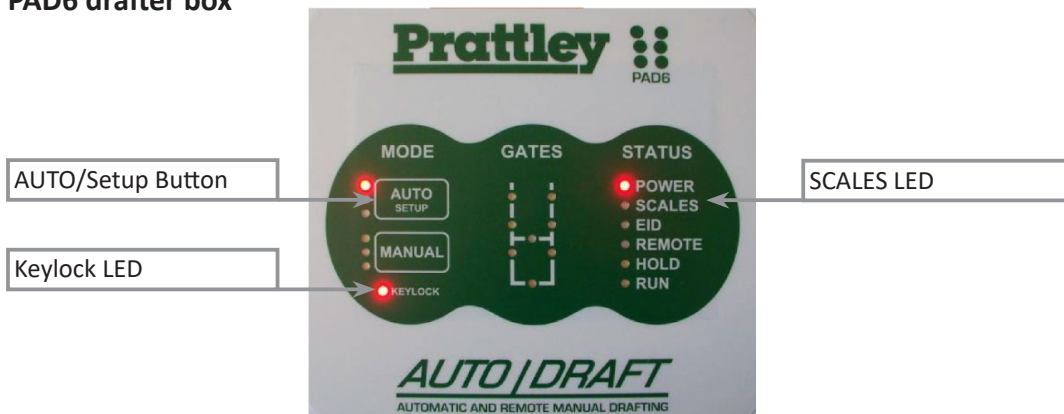
PAD6 Connect Plug fitted to Tru-Test Indicator



PAD6 EID Connect Plug



PAD6 drafter box



PAD6 AIR DRAFTERS

With the main box in AUTO mode:

Click buttons for auto functions, long-press to override or bypass the gates.

- Click DRAFT or 2 or 3 to open/close the inlet – the HOLD button can be used to open the inlet if the crate is empty i.e. an exit gate is open.
- Click HOLD to close the inlet and hold, or to hold a sheep already in the crate (if clicked before it is weighed).
 - o Click DRAFT to release a held sheep in the direction shown in the XR and record it.
 - o Long-press an ARROW button to release the sheep to a new direction and override the record in the XR – only works if the XR is connected, has a draft range and is able to record.
 - o Click 2 or 3 and then long-press 1, 2 or 3 (like sending Morse code) to cancel weighing the sheep and release it without weighing or recording in the XR.
 - o Long-press the HOLD button to open the inlet again to back a sheep out. (Click 2 or 3 will also open the inlet)
- Click TEACH to open the inlet and set the auto weight-on threshold (pig drafter).
- Click TEACH to close the inlet and set the weight-on time delay (pig drafter).
- Click AUTO to open or close the inlet, the RUN LED will light and the weight on/off and bump features will be active. (Note: bump feature needs the scales connected)
- Long-press an ARROW button when closing the inlet to bypass that sheep to a pen without weighing or recording in the XR.
- Long-press an ARROW button when opening the inlet to bypass a line of sheep without weighing or recording in the XR.
 - o Click any button to close the inlet (exit stays open). Once the crate is clear resume normal drafting.

In MANUAL the inlet stays open and the exits open while the ARROW buttons are held down.

- Press-down an ARROW button to open the inlet and exit gate.
- Release the button to close the straight ahead gate or exit gate, the draft gates stay open.
- Click HOLD to close the draft gates.

PAD6 ELECTRIC DRAFTERS

With the main box in AUTO mode: Click buttons for auto functions, long-press to override or bypass the gates.

- Click DRAFT or 2 or 3 to open/close the inlet as per original PAD6 drafters. The HOLD button can be used to open the inlet if the crate is empty i.e. an exit gate is open.
- Click HOLD to close the inlet and hold, or to hold a sheep already in the crate (if clicked before it is weighed).
 - o Click DRAFT to release a held sheep in the direction shown in the XR and record it.
 - o Long-press an ARROW button to release the sheep to a new direction and override the record in the XR – only works if the XR is connected, has a draft range and is able to record.
 - o Click 2 or 3 and then long-press 1, 2 or 3 (like sending Morse code) to cancel weighing the sheep and release it without weighing or recording in the XR.
 - o Long-press the HOLD button to open the inlet again to back a sheep out. (Click 2 or 3 will also open the inlet)
 - o Click HOLD to close the inlet and exits if they have been jammed and the motor has timed out.
- Click TEACH to open or close the inlet, when the inlet is open the width can be set (can click any button to close again)
- Click AUTO to open or close the inlet, the RUN LED will light and the weight on/off and bump features will be active. (Note: bump feature needs the scales connected)
- Long-press an ARROW button when closing the inlet to bypass that sheep to a pen without weighing or recording in the XR.
- Long-press an ARROW button when opening the inlet to bypass a line of sheep without weighing or recording in the XR.
- Click any button to close the inlet (exit stays open). Once the crate is clear resume normal drafting.

The buttons in MANUAL mode are almost the complete opposite: Click to operate the exits, keep-pressed to open the inlet.

- Press-down an ARROW button to open the inlet and exit gate.
- Release the button to close the inlet (exit stays open)
- When the crate clears hold-down a different ARROW button to draft the other way.
- Press-down HOLD to open the inlet but keep the exits closed.
- Release the HOLD button to close the inlet (exit stays closed)
- Click an ARROW button to open the exit (inlet only moves while the button is pressed)

TO PAIR WITH BLUETOOTH

- Enable Bluetooth in your Indicator.
- Put 12VDC power on the PAD6 control box, wait for the power up sequence.
- Double tap the AUTO touch pad on the control box to release the keylock LED.
- Touch-and-hold AUTO/SETUP for about 3 seconds until the LEDs start blinking.
 - While the PAD6 searches for Bluetooth devices the second and third LEDs will alternate blinking.
 - If an Indicator is found the SCALES LED will light up and is set up to go.
 - If the LEDs stop blinking and an Indicator is not found the PAD6 will be in Bluetooth slave mode and able to accept a connection from a Gallagher TSi or Computer.
- The PAD6 remembers the last connection, so that next time it is powered up or the SETUP button is touched, it goes back to looking for that scale again.

If the scales don't connect first time, try turning the PAD6 off and back on again. This may happen if the Bluetooth has never been used before.

BATTERY 12V 17Ah(20hr)



General Features

- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	5 years
Nominal Capacity 77°F(25°C)	
20 hour rate	(0.85A, 10.5V) 17Ah

1. WIRELESS DONGLE

- Insert wireless dongle into con 1 of indicator and tighten screws.
- Connect power to PAD 600 then turn indicator on to weigh screen. Should take approx 5 seconds then the scales light will come on PAD 600 which means it has paired up.
- If not, double click auto on PAD 600 so that the keylock light comes off. Hold down the connect button underneath the dongle until the scales light appears on the PAD 600.

2. REMOTE NOT WORKING

- Disconnect power to PAD 600 then power back up. Double click on auto so key lock light comes off. Hold down the two side buttons until gates start working again.
- Make sure the battery light flashes when a button on the remote is pressed. If not, battery needs replacing or battery has disconnected from terminals.
- If all else fails then plug in cabled remote and send away for further inspection.

3. PRATTLEY NOT DRAFTING

- Check that scales light on PAD 600 box is lit up. If not wireless dongle needs to be paired up with PAD 600. See number 1.
- Check indicator for messages. Fields may need to be turned off, eg: Turn off EID if not in use.
- ***Make sure weight recording is on manual, not automatic.***
- Set drafter icons to large arrows.
- Make sure high draft limit is set appropriately, eg: 42 kgs to 300 kgs.

4. MAINTENANCE

- Wipe dust and grit off gate rails.
- Use Silicone spray to keep the gate rails smooth so gates open freely.
- Don't spray silicone on actual air ram.
- Drafter should operate at approx 45 psi. This is factory set so gates are synchronised. You can change individual air ram pressure by adjusting the screws at the end of each ram. Don't promote this as it unsynchronises the drafter.
- Air rams on the PAD 600 drafters are all 80's so specify when ordering.

5. EID READERS

- Always use separate power sources for both the drafter and reader.
- Make sure batteries have a good charge otherwise the read on the panel will drop away.

1. Remove packers (90mm tube) at the entry end of Autodrafter.



2. Lift up Cradle and slide loadbar with cable end facing you.

3. Secure Loadbar Base with 4 x M10x30 Bolt & Nut



4. Secure Loadbar to Cradle with 2 x M10x25 Bolt

5. Run the loadbar cable as shown, from bottom rails to top, leaving about 500mm at the other end.



6. Tie excess cable at the bottom rail. Ensure cables to not obstruct the movement of the linkages at bottom of cradle.

AUTO mode: Click for auto functions, Hold-down to override or bypass the exit or inlet gate.

- Click DRAFT, 2 or 3 button to open/close the inlet as per original PAD6 drafters.
- Click HOLD to close the inlet and hold, or to hold a sheep already in the crate (if clicked before it is weighed).
 - o Click DRAFT to release a held sheep in the direction shown in the XR and record it.
 - o Hold-down an ARROW button to release the sheep to a new direction and override the record in the XR.
 - o Hold-down the HOLD button to open the inlet again to back a sheep out. (Click 2 or 3 will also open the inlet)
 - o Hold-down HOLD and an ARROW button to release it ***without*** weighing or recording in the XR. (for example scales are waiting for tag, scales have already weighed, scales are off)
 - o Click HOLD to close the inlet and exits if they have been jammed and the motor has timed out.
 - o (old version) Click 2 or 3 and then Hold-down 2 or 3 (like sending Morse code) to cancel weighing the sheep and release it without weighing or recording in the XR.
- Click TEACH to open or close the inlet, when the inlet is open the width can be set (can click any button to close again)
- Click AUTO to open or close the inlet, the RUN LED will light and the weight on/off and bump features will be active. (Note: bump needs the scales connected)
- Hold-down an ARROW button when closing the inlet to bypass that sheep to a pen without weighing or recording in the XR.
- Hold-down an ARROW button when opening the inlet to bypass a line of sheep without weighing or recording in the XR.
 - o Click any button to close the inlet (exit stays open). When the crate is clear resume normal drafting.

MANUAL mode is almost the complete opposite: Click to operate the exits, Hold-down to open the inlet.

- Hold-down an ARROW button to open the inlet and exit gate.
- Release the button to close the inlet (exit stays open)
- When the crate clears Hold-down a different ARROW button to draft the other way.
- Hold-down HOLD to open the inlet but keep the exits closed.
- Release the HOLD button to close the inlet (exit stays closed)
- Click an ARROW button to open the exit (inlet only moves while the button is pressed)

SETTING THE INLET GATE OPENING WIDTH

Set the width of the inlet gate to stop two sheep entering the crate side-by-side. The width can be narrower than the sheep as the motor for the inlet gate is torque limited allowing the sheep to push it open as they go past.

- Release the keylock by a double tap on the Manual or Auto mode buttons.
- Touch SETUP (Auto mode button).
- If the inlet gate is closed click DRAFT on the Remote to open it.
- Move the inlet gate to the right width.
- Click a button on the Remote to start using the drafter.

PAD6 MAIN BOX AUTO MODE LIGHTS

Top – standard

Auto drafting exit gates and remote controlled inlet gate.

The inlet gate is controlled by the Remote, the same as Prattley air powered drafters.

Middle – weight on-off

Auto drafting exit gates and remote or weight controlled inlet gate.

- Click AUTO on the remote to open or close the inlet gate – RUN will light on the drafters status and the drafter will take over control of the inlet gate. When the scales detect a weight going on the platform the inlet gate closes, when the weight goes off the exit gate closes. Clicking any other button will cancel AUTO/RUN mode.
- Click TEACH on the remote to open and close the inlet gate – this trains the AUTO/RUN mode. The controller records the timing between the weight going on or off and the gates closing. The drafter can only record the time after the scales have detected a weight on or off so TEACH is really only useful to slow things down. The default time after power-up is zero – as fast as possible. To teach just the exit gate time; click DRAFT to close the inlet gate and click TEACH to close, and record, the exit gate.
- Click DRAFT on the remote to open or close the inlet gate – same as a standard Prattley drafter. This also cancels RUN mode.

Bottom – weight on-off and bump

Auto drafting exit gates and remote or weight or bump controlled inlet gate.

This adds bump detection to the inlet gate. When the inlet is open it tries to maintain the open width but a sheep pushing through bumps the inlet to open a bit wider, in AUTO/RUN mode the controller recognises this and automatically closes the inlet.



ANIMAL MANAGEMENT SYSTEMS

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