

Electro-Magnetic Compatibility (EMC)



This product complies with Council Directive 89/336/EEC when installed and used in accordance with the relevant instructions.

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RDS Document number

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User Guide

Multi-function Drill Control

Calibration and Operation

Software Ref: UDJ 308

Overview

Contents

Operating Summary	3
A Forward Speed/Sensor calibration	4
B Area/Width	6
C Tramlining	8
D Fan Speed/Speed Alarms	15
E Seed Distribution Shaft speed	16
F Hopper level	17

The *Multi-function Drill Control* is suited for both conventional and pneumatic drills. It has an illuminated 4 digit display with 6 display functions and alarm functions for fan speed and seed distribution shaft rpm.

It has two memory registers to record part or total area worked. Data is automatically stored in memory when the instrument is powered off.

The instrument must be initially calibrated to suit the implement being controlled. A programme mode allows default settings to be altered as required.

Operating Summary

Select  and

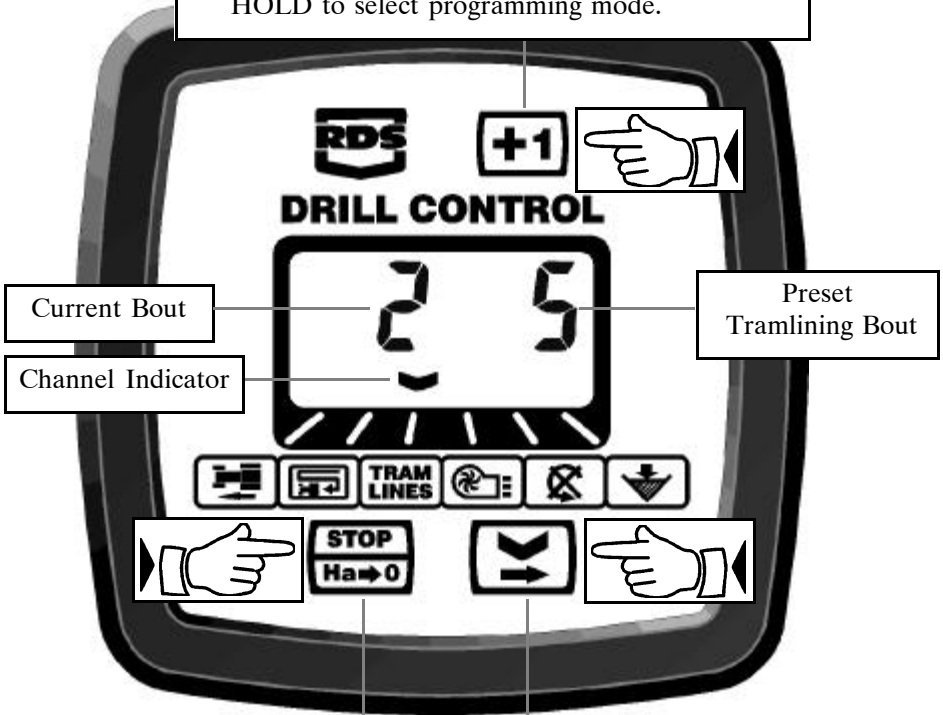
PRESS to switch between Area Total 1 and 2

or select  and

PRESS to manually advance Bout Number

or

HOLD to select programming mode.



PRESS to override automatic advance of Bout number if drill is lifted,

or

HOLD to reset currently displayed Area Total

PRESS to select Channel 1 to 6

CH Function

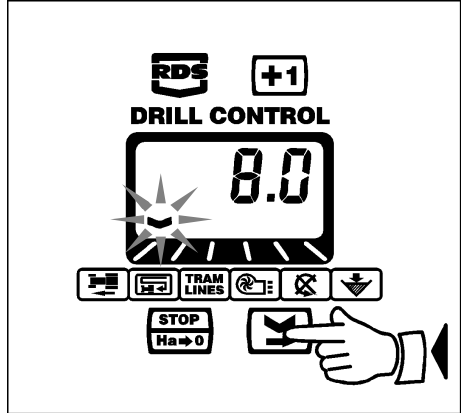
Units

1	Forward Speed	k m/h
2	Area Total 1 or 2	ha
3	Tramline/Current bout	
4	Fan Speed	r p/n
5	Shaft Speed	r p/n
6	Hopper level alarm	'alar'

A. Forward Speed/Sensor calibration

A.1 Select Forward Speed

If the forward speed is less than 2km/h then the display alternates between the bout number and forward speed.



A.2 Speed Sensor Manual Calibration

The theoretical calibration figure equals the rolling circumference (diameter x 3.142) of the landwheel in metres. Auto calibration is however more accurate in field conditions.

Default value = 2.000m

- 1 Select Channel 1
- 2 HOLD CONTINUOUSLY

Enters programming mode after 3 sec.

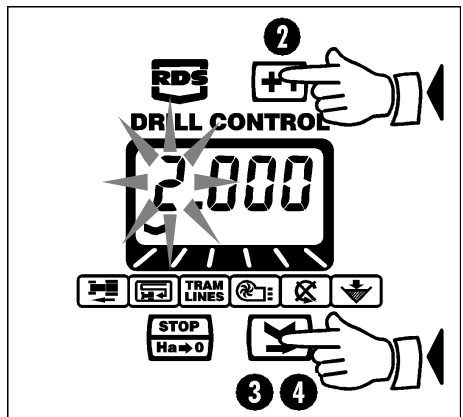
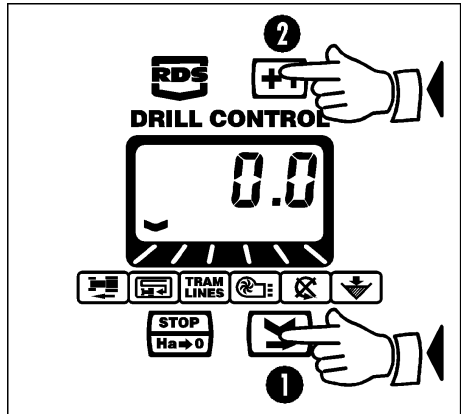
- 3 PRESS to select digit/dec. point.

~~2.900~~, ~~2.000~~, ~~2.900~~, ~~2.000~~

- 4 HOLD to change digit or move decimal point.

~~2.100~~, ~~2.200~~, ~~2.300~~, ~~2.400~~

- 5 RELEASE to select next digit.



A. Forward Speed/Sensor calibration

A.3 Auto Speed Calibration

Auto-calibrate in field conditions to for maximum accuracy.

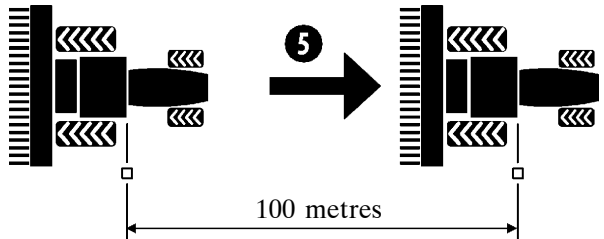
- 1 Set markers 100m apart and position vehicle opposite first marker.
- 2 Select Channel 1
- 3 HOLD CONTINUOUSLY

Enters programming mode after 3 sec.

- 4 PRESS

Starts auto calibration.

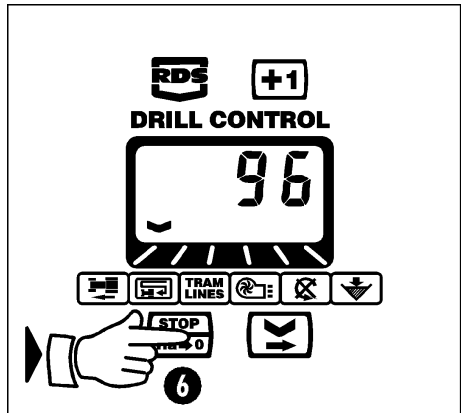
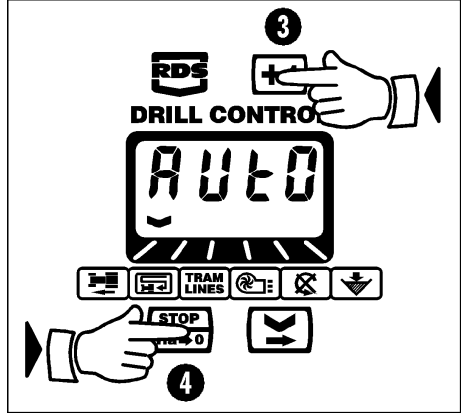
- 5 Drive to second marker
- Displays no. of sensor pulses.*



- 6 PRESS

Auto-calibration complete.

Calibration factor is calculated and stored in memory.



B. Area/Width

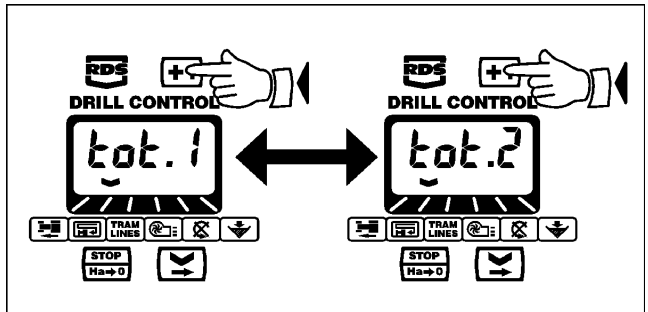
B.1 Select Area Channel

There are two area registers each independently resettable.



B.2 Select Area Register

The display subsequently reverts to area accumulated since the last reset.

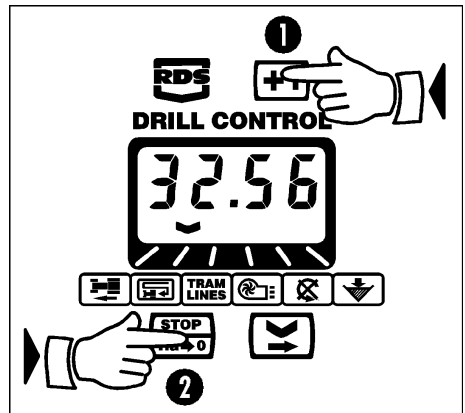


B.3 Reset Area Register

- 1 Select either total.
- 2 HOLD for 5 seconds.



Total resets to zero



B.4 Programme Working Width

The working width (metres) of the machine.

Default value = 2.000m

- 1 Select Channel 2
- 2 HOLD CONTINUOUSLY

Enters programming mode after 3 sec.

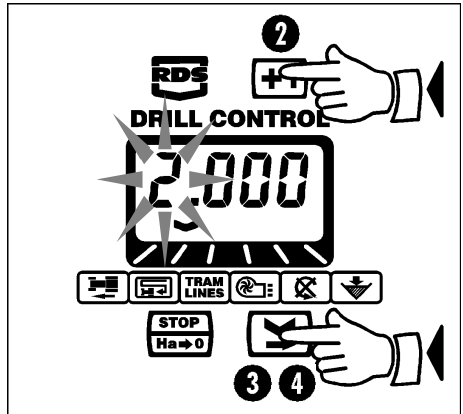
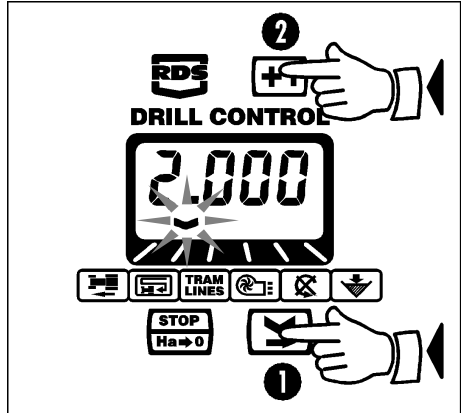
- 3 PRESS to select digit/dec. point.

~~2.900~~, ~~2.000~~, ~~2.600~~, ~~2.000~~

- 4 HOLD to change digit or move decimal point.

~~2.100~~, ~~2.200~~, ~~2.300~~, ~~2.400~~

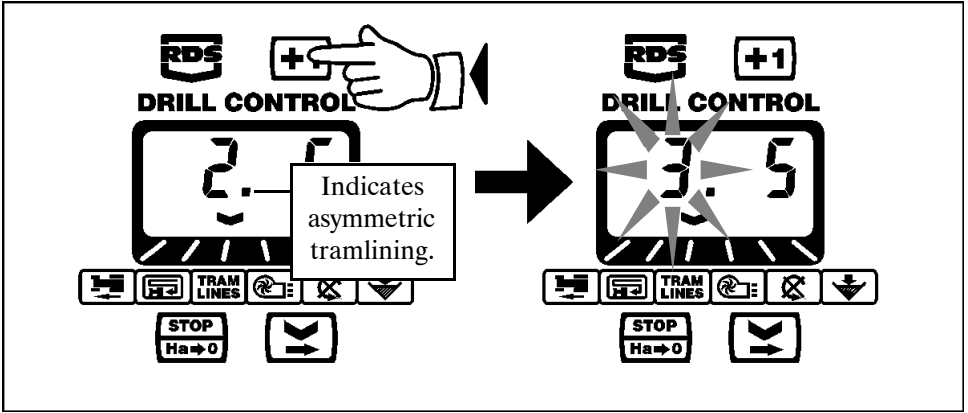
- 5 RELEASE to select next digit.



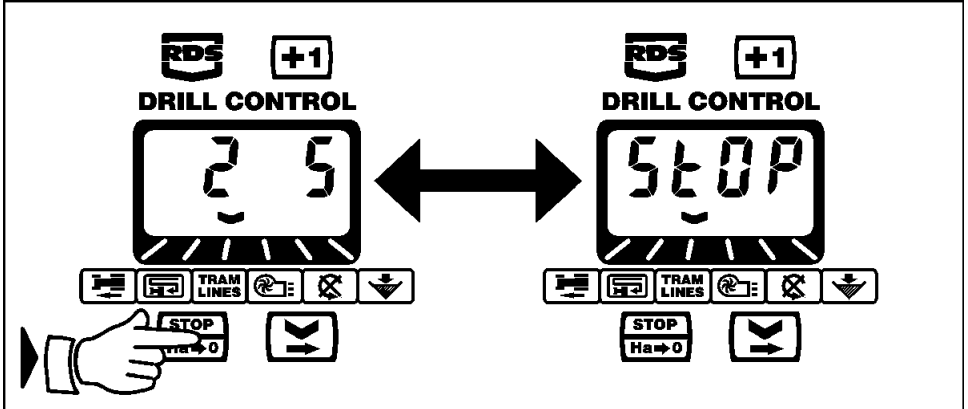
C. Tramlining

C.1 Manually advance bout number

The display defaults to this channel after 10 seconds unless Area Total is selected.



C.2 Hold Bout number

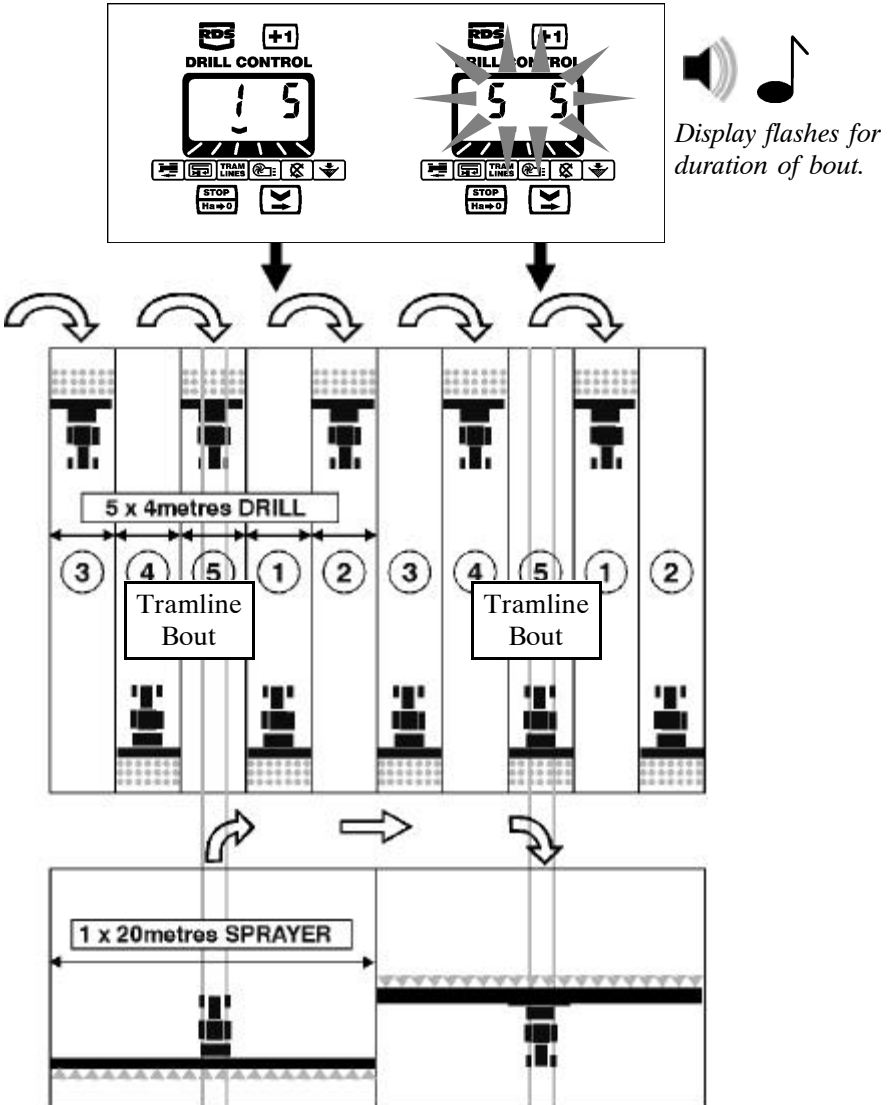


PRESS again to continue counting

There are four systems of tramlining - symmetrical, asymmetrical left, asymmetrical right and 18 metre. The tramline bout is programmable from 0 (function off) to 12 in symmetrical, asymmetrical left and asymmetrical right.

C.3 Symmetrical tramlining 13 to programme tramlining

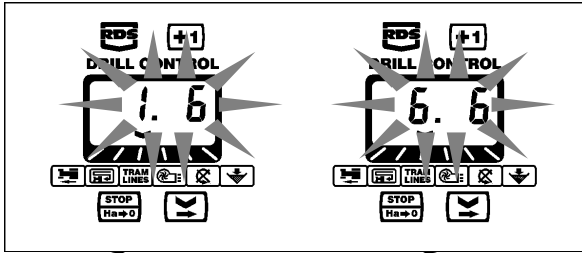
Two + two seed spouts are closed during the tramline bout only.



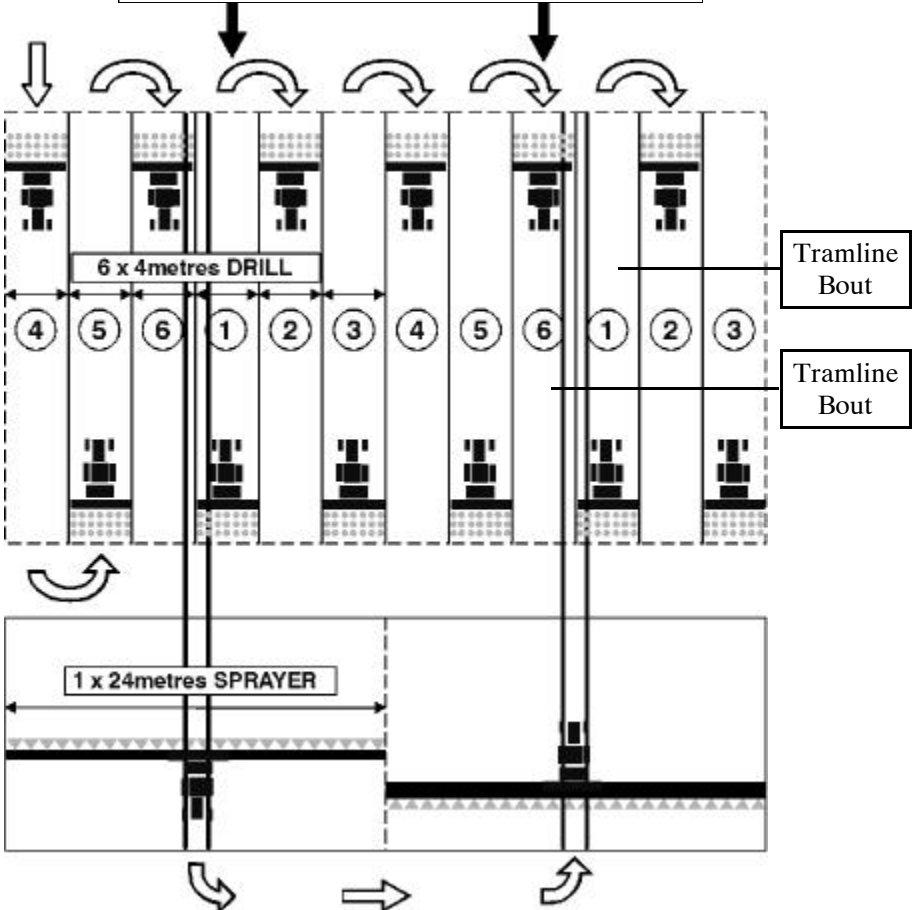
C. Tramlining

C 4.1 Asymmetrical Left tramlining 13 to programme tramlining

Two seed spouts are closed on the lefthand side of the drill on bouts 1 and 6.

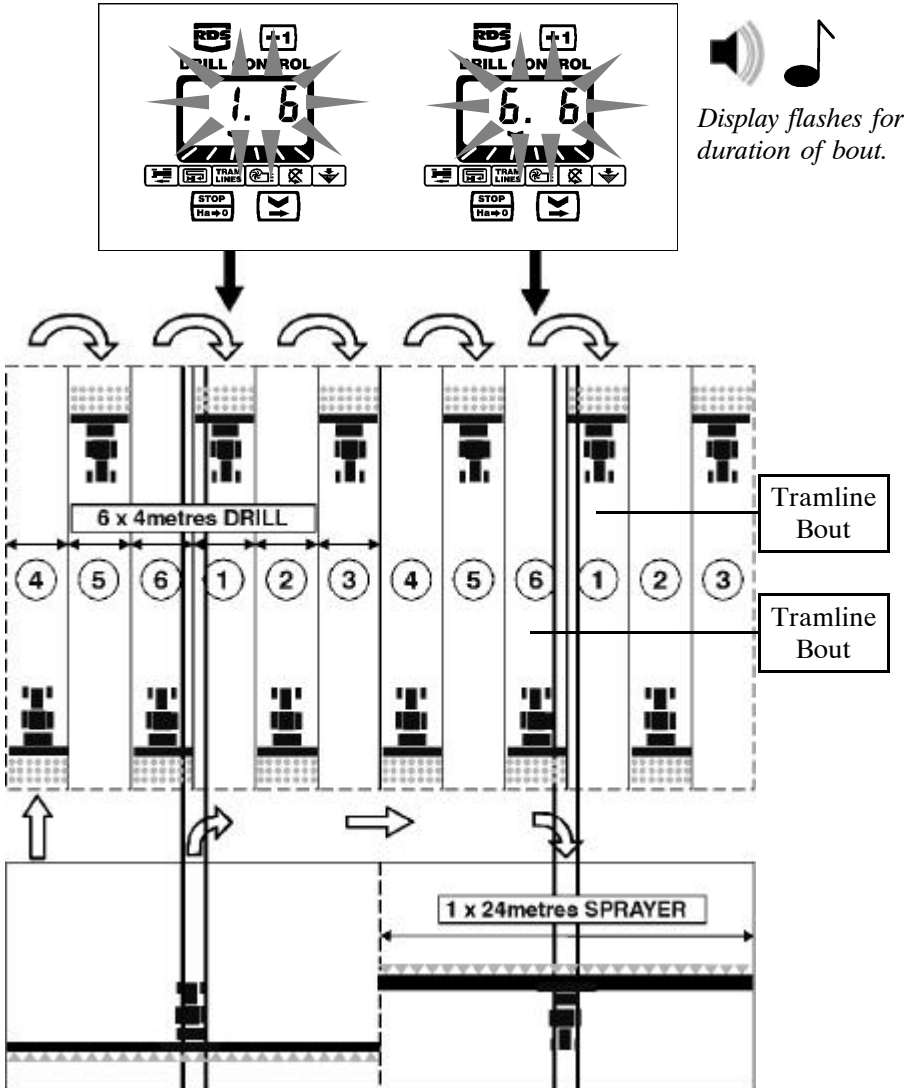


Display flashes for duration of bout.



C 4.2 Asymmetrical Right tramlining 14 to programme tramlining

Two seed spouts are closed on the righthand side of the drill on bouts 1 and 6.



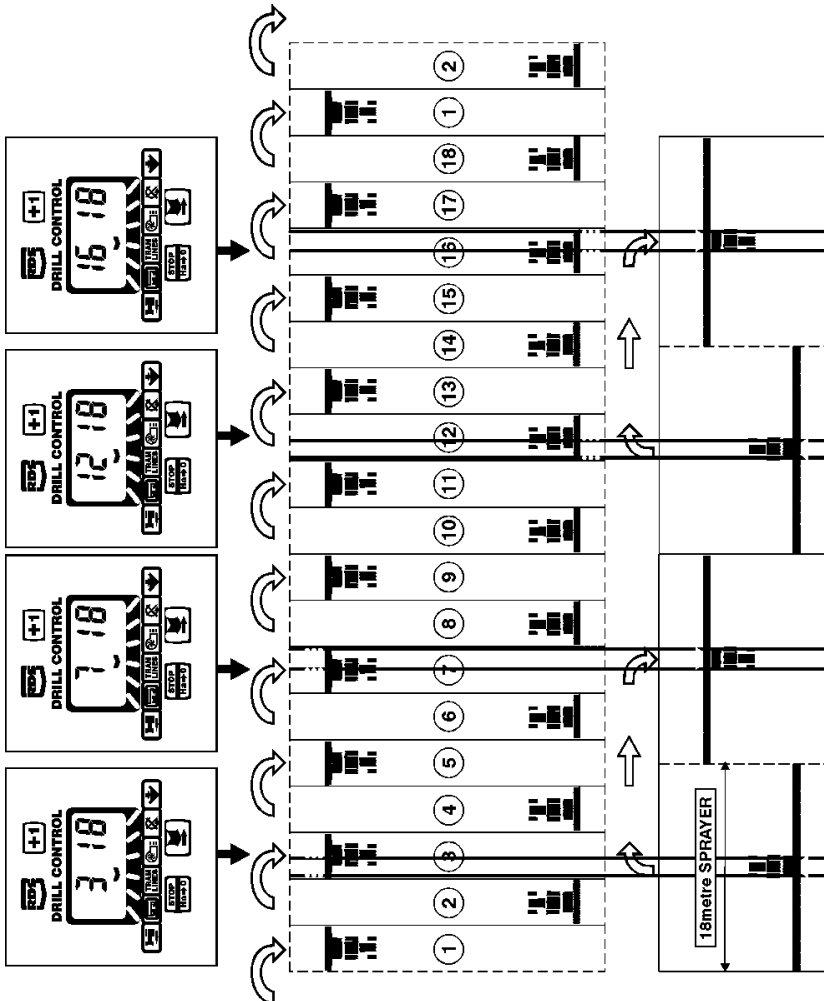
C 4.3 18 Metre Tramlining

For use with a 4 metre drill and an 18 metre sprayer. (2 x 2 RH seed spouts are closed on bouts 3 and 16, and 2 x 2 LH seed spouts closed on bouts 7 and 12).

Starting on bout 1 requires turning LEFT at the end of the FIRST bout.

NOTE: To turn RIGHT at the end of the first bout, cycle the instrument display through to bout 10 before beginning.

The instrument will beep once at the beginning of each tramline bout and the display will flash for the duration of the tramline bout.



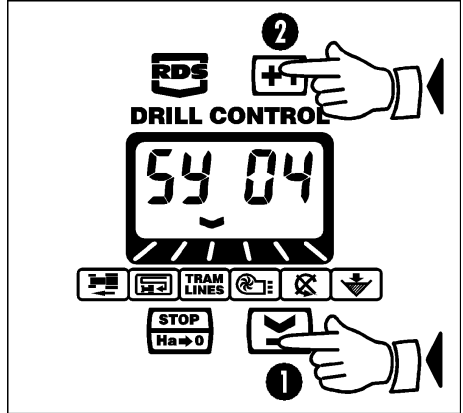
C.5 Programme Tramline Bout number

The tramline bout is programmable from 0 (function off) to 12 for either Asymmetric Left or Asymmetric Right tramlining.

It is also programmable for 18 metre tramlining.

Default value =SY 04

(Symmetrical - tramline bout 4)

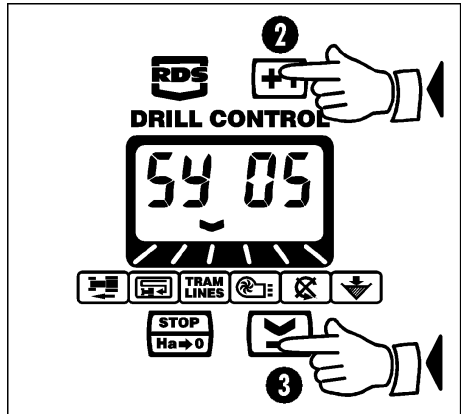


① Select Channel 3.

② HOLD CONTINUOUSLY

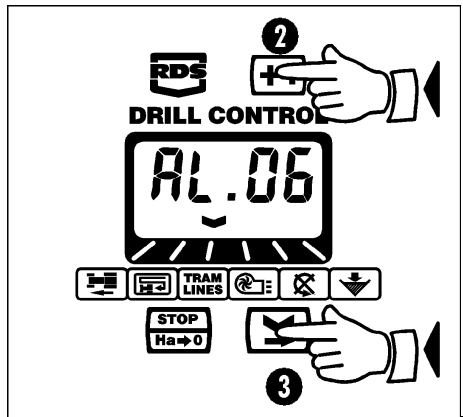
Enters programming mode after 3 sec.

③ PRESS and the tramline bout cycles ...SY05, SY06, SY07...SY12 for symmetrical tramlining,



... then AL.00, AL.01, AL.02 ... AL.12 for Asymmetric Left tramlining.

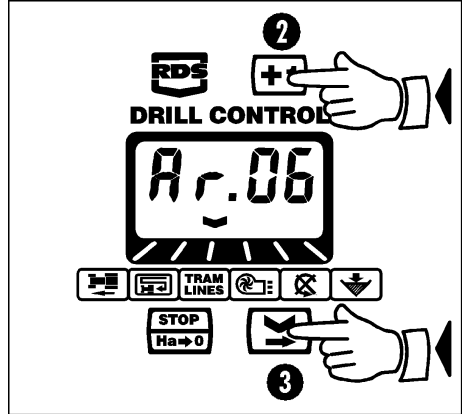
Setting SY00 or AL.00 switches off the tramlining function.



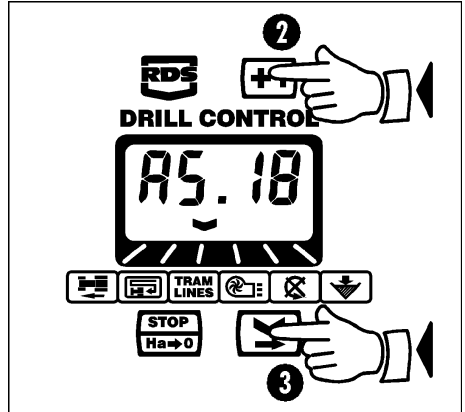
C. Tramlining

... then Ar.00, Ar.01, Ar.02 ...
Ar.12 for Asymmetric Right
tramlining.

Setting Ar.00 switches off the
tramlining function.



... then 18 for the 18 metre
tramlining mode.



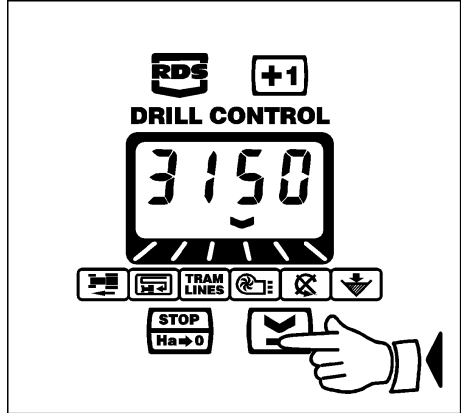
D.1 Select Fan Speed channel

There is a non-programmable overspeed alarm and a programmable Low-speed alarm. An alarm condition causes the display to default to this channel, sound 5 beeps and flash the actual speed.

Alarm is inhibited if forward speed is less than 2 km/hr.

*Std Overspeed Alarm = 4000 rpm
(some options = 4500 rpm)*

Default Low-speed Alarm = 2700 rpm

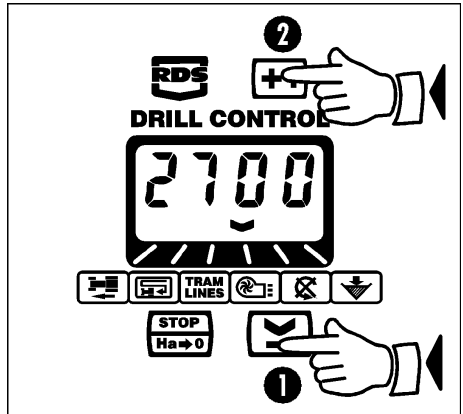


D.2 Set low Speed Alarm

❶ Select Channel 4.

❷ HOLD CONTINUOUSLY

Enters programming mode after 3 sec.



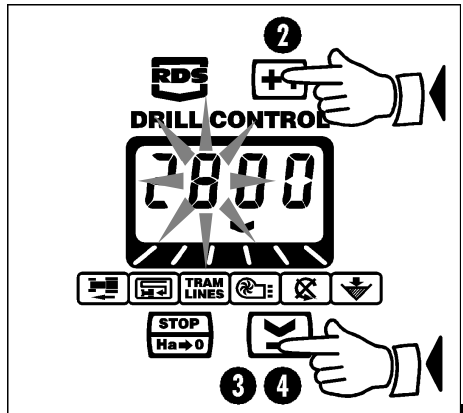
❸ PRESS to select digit/dec. point.

❸ 2.900, 2.000, 2.600, 2.000

❹ HOLD to change digit or move decimal point.

❹ 2.100, 2.200, 2.300, 2.400

❺ RELEASE to select next digit.



E. Seed Distribution Shaft Speed

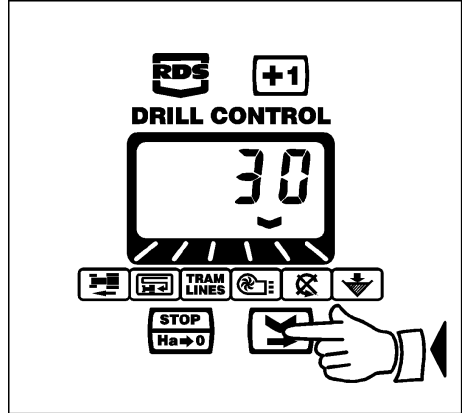
E.1 Select Shaft Speed channel

Typical speed = 1 - 70 rpm.
Displays to the nearest rpm.

There is a programmable Low-speed alarm. An alarm condition causes the display to default to this channel, sound 5 beeps and show the actual speed.

Alarm is inhibited if forward speed is less than 2 km/hr.

Default Low-speed Alarm = 0 rpm



E.2 Set low Speed Alarm




If required the alarm is set as for the fan speed alarm.

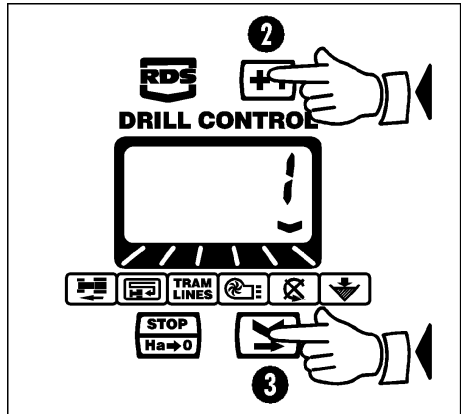
F.1 Seed Hopper level

When the seed level uncovers the sensor the display defaults to this channel and sound 5 beeps.



F.2 Enable Seed hopper level sensor

- 1 Select Channel 6 
 - 2 PRESS and HOLD  continuously
 - 3 PRESS  to cycle 0...1
- 0 = Sensor disabled
1 = Sensor enabled





Your distributor is: