

BA7000 Operators Manual

BA7000 Sprayer Console

V1.2







Content

FACTO RY D	EFAULT SCREEN	8
1. SPRAYER	SETUP OPERATION	9
1.1	SPRAYER SETUP MENU	10
	1.1.1 Set the PRESET RATE	11
	1.1.2 Set the MIN FLOW HOLD	11
	1.1.3 Change the PRESET WIDTH	12
	1.1.4 Change the LOW SPEED SHUT OFF	13
	1.1.5 Set the TANK VOLUME	13
	1.1.6 Set the APPLICATION MODE	13
	1.1.7 Set the SPEED CALIBRATION FACTOR	15
	1.1.8 AUTOMATIC SPEED CALIBRATION	15
	1.1.9 MANUAL ENTRY SPEED CALIBRATION	15
	1.1.10 Set the FLOW CALIBRATION FACTOR	17
	1.1.11 AUTOMATIC FLOW CALIBRATION	17
	1.1.12 MANUAL FLOW CALIBRATION	17
	1.1.13 SET A MANUAL SPEED	18
	1.1.14 ADJUST TO RATE INCREMENT	18
	1.1.15 PRESSURE CALIBRATION	19
2. ALARMS	SETUP MENU	20
2.1	RATE ALARMS	21
2	2.1.1 Toggle the MINIMUM FLOW ALARM	21
	2.1.2 Adjust the MINIMUM FLOW ALARM POINT	21
	2.1.3 Toggle the APPLICATION RATE LOW ALARM	21
	2.1.4 Adjust the APPLICATION RATE LOW POINT	22
	2.1.5 Toggle the APPLICATION RATE HIGH ALARM	22
	2.1.6 Adjust the APPLICATION RATE HIGH POINT	22
2.2	DAN ALADMO	02
2.2	FAN ALARMS 2.2.1 Toople the FAN SPEED LOW ALARM	23 24
	2.2.1 Toggle the FAN SPEED LOW ALARM 2.2.2 Adjust the FAN SPEED LOW POINT	24 24
	2.2.3 Toggle the FAN SPEED HIGH ALARM	24
	2.2.4 Adjust the FAN SPEED HIGH POINT	25
	2.2.1 12.3.20 0.2 1.1. 0.1.2.22 1.1.01. 1.01.1.1	25
2.3	SPEED ALARMS	26
	2.3.1 Toggle the SPEED LOW ALARM	27
	2.3.2 Adjust the SPEED LOW POINT	27
	2.3.3 Toggle the SPEED HIGH ALARM	27
	2.3.4 Adjust the SPEED HIGH POINT	28
2.4	TANK ALARMS	29
	2.4.1 Topple the VOLUME LOW ALARM	30
	2.4.2 Adjust the VOLUME LOW POINT	30
	170 TT CTT 0 TT 1	
3. OPERATI	NG HISTO RY	31
3.1	TOTALS HISTORY	32
3.1	3.1.1 Reset the Total Volume	33
	3.1.2 Reset the Sub Volume	33
	3.1.3 Reset the Total Area	33
	3.1.4 Reset the Sub Area	33
	3.1.5 Reset the Total Distance	34
	3.1.6 Reset the Sub Distance	34
	3.1.7 Reset the Total Time	34
	3.1.8 Change to a Different Sub Area	34
2.2	25	
3.2	FAN HISTORY	35
3.3	MACHINE HISTORY	36
	3.3.1 Enter the Machine History Screen	36

Page No.

Table of Contents V 1.2

Content Page N	
4. OPERATIONS: SPRAYER	38
4.1 OPERATION OF THE SPRAYER	39
4.1.1 Display the VOLUME REMAINING IN THE TANK	39
4.1.2 FILL THE TANK	39
4.1.3 Toogle between MANUAL AND AUTO	39
4.1.4 Toggle between FLOW RATE, PUMP SPEED AND LIQUID PRES	
4.1.5 Turn a SECTION ON	39
4.2 TO BEGIN SPRAYING	40
4.2.1 Increase or decrease the APPLICATION RATE (MANUAL MODE)	40
4.2.2 Increase or decrease the APPLICATION RATE (AUTO MODE)	40
4.2.3 Choose a PRESET APPLICATION RATE (AUTO MODE)	40
5 DUAL BOOM SETUP	41
6 DUAL BOOM SETUPUSING SPEED SWITCHING MODE	42
6.1 TOGGLE DUAL BOOM	42
6.2 PRIMARY BOOM SETUP	42
6.3 SWITCHING MODE SETUP (SPEED)	42
6.4 SWITCHING ORDER SETUP	43
6.5 SET SWITCHING POINTS	43
6.6 SET SWITCH ON TIMER AND SWITCH OFF TIMER	44
7 DUAL BOOMSETUP USING FLOW SWITCHING MODE	45
7.1 TOGGLE DUAL BOOM	45
7.2 PRIMARY BOOM SETP	45
7.3 SWITCHING MODE SETUP(FLOW)	45
7.4 SWITCHING ORDER SETUP	46
7.5 SET SWITCHING POINTS(FLOW) MENU	47
7.5.1 FRONT LINE NOZZLES Setup	48
7.5.1a Set MINIMUM FLOW for Nozzles (Frontline)	49
7.5.1b Set MAXIMUM FLOW for Nozzles(Frontline)	49
7.5.1c Set NUMBER OF NOZZLES for each Section for Flow Switching (Fig. 1)	
7.5.2 BACKLINE NOZZLES Setup	51
7.5.2a Set MINIMUM FLOW for Nozzles(Backline)	52
7.5.2b Set MAXIMUM FLOW for Nozzles (Backline)	52
7.5.2c Set NUMBER OF NOZZLES for each section for Flow Switching(B	Back) 53
7.5.3 DUAL LINE SWITCHING (FLOW) Screen	54
7.5.3a DUAL LINE SWITCHING VALUES (FLOW)	55
7.5.3b Setting SECOND LINE SWITCHING POINT(FLOW)	56
7.5.3c Setting DUAL LINE SWITCHING POINT (FLOW)	56
7.6 SET SWITCH ON TIMER AND SWITCH OFF TIMER	57
8 DUAL BOOMSETUP USING PRESSURE SWITCHING MODE	58
8.1 TOGGLE DUAL BOOM	58
8.2 PRIMARY BOOM SETP	58
8.3 SWITCHING MODE SETUP(FLOW)	58
8.4 SWITCHING ORDER SETUP	59
8.5 SET SWITCHING POINTS (PRESSURE) MENU	60
8.5.1 Set SWITCHING POINTS when P,B is selected	60
8.5.2 Set SWITCHING POINTS when P,S,B is selected	61
8.6 SET SWITCH ON TIMER AND SWITCH OFF TIMER	62

V 1.2

Cor	Content		Page No.	Page No.	
9.	CONFIG	OPTIONS	63		
	0.1	EXTRA CONFIGURATION OPTIONS	64		
	9.1		64 64		
		9.1.1 Enter DIAGNOSTICS MODE 9.1.2 Restore to FACTORY SETTINGS	64 64		
			64 64		
		9.1.3 Toggle the KEY BEEPER 9.1.4 Change the KEY BEEPER TIME	64 64		
		9.1.5 Topple the KEY REPEAT	64		
		9.1.6 Adjust the KEY REPEAT DURATION	65		
		9.1.7 Change the ALARM CYCLE TIME	65		
		9.1.8 Change the ALARM DUTY CYCLE	65		
		9.1.9 Change the NUMBER OF ALARM CYCLES	65		
		9.1.10 Toggle the ALARM BEEPER ON/OFF	65		
10.	DIAGNO	DSTICS MODE LED TEST	66 67		
	10.2	SWITCH TEST	68		
	10.3	B KEYS TEST		69	
	10.4	4 SENSORS TEST	70		
	10.5	5 RELAYS TEST	71		
	10.6	5 REG VALVE TEST	72		
	10.7	7 EEPROM TEST	73		
	10.8	B DISPLAY TEST	74		

25 May 2004 Page 1

Personal Notes

V 1 2

25 May 2004 Page 1

FACTORY DEFAULT SCREEN

The values shown here are reference values, none of these are editable by the user.

If you are having problems with your sprayer operation this is a good place to look to compare your values such as flow cal factor and wheel cal factor against the values the unit came out of the factory with.

If you do a cold reset (restore to factory defaults) these are the values that will be loaded into your controller.



Factory Default Screen

SPRAYER SETUPOPERATION

To return to the Runtime screen from any menu, press the MENU button. The MENU button may have to be pressed several times to return to the Runtime screen, depending what menu screen is displayed at the time. To return to the previous menu, press the MENU button once



Runtime screen

1.1 SPRAYER SETUP MENU



Sprayer Setup Screen

1.1.1 SET THE PRESET RATE:

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP. The focus window will be on TARGETRATE

Press SELECT 1 .. SELECT 4 to choose the rate you wish to adjust. The rate you are editing will be shown in brackets. 4 different Preset Rates can be set. Press SELECT MODE to edit target rate. A star(*) should appear after TARGET Use Inc/Dec (Up and down arrows) to change the target rate Press SELECT MODE to accept the changes

1.1.2 SET THE MINIMUM FLOW HOLD VALUE:

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) to move to MINIMUM FLOW

Press SELECT MODE to edit the value. A star(*) should appear after MINIMUM

Use Inc/Dec (Up and down arrows) to change the minimum flow value

1.1.3 CHANGE THE PRESET WIDTH and SECTION WIDTHS:

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on PRESET WIDTH. This window shows the current width of the boom.

Press SELECT MODE to advance to the next screen (Section Widths Setup), as shown below to be able to change the widths of each section



Section Widths Setup Screen

Press the Inc/Dec (up and down arrows.) To move the focus window to the section width that requires changing. The Dec button moves the focus window to the right from SECT 1 through to SECT 7, the Inc button moves the focus in the apposite direction.

If the boomspray has less than 7 sections then only the number of sections set from the factory will be shown.

Press SELECT MODE to edit the section width. A star(*) will appear.

Use the Inc/Dec (up and down arrows) to change the section width. As the section is changed the TO TAL WIDIH value will change accordingly

Press SELECT MODE to accept the changes

Use the Inc/Dec (up and down arrows) to change the section width Press SELECT MODE to accept the changes.

Repeat the process for as many section widths that need changing.

Press MENU to go back to the previous Spray Setup Screen.

1.1.4 CHANGE THE LOW SPEED SHUTOFF:

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on LOW SPEED SHUTOFF

Press SELECT MODE. A star(*) will appear after SPEED

Use the Inc/Dec (up and down arrows) to change the shutoff value

Press SELECT MODE to accept the changes

1.1.5 SET THE TANK VOLUME:

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on TANK VOLUME

Press SELECT MODE. A star(*) will appear after TANK

Use the Inc/Dec (up and down arrows) to change the tank volume. Volume changes in 50 litres increments

Press SELECT MODE to accept the changes

1.1.6 TOGGLE DUAL BOOM ON/OFF:

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

If the boomspray is a single line boom then the value should be OFF, and there is no further setup required for the DUAL BOOM option

Press SELECT MODE, if the boom spray is a DUAL BOOM; to advance to the next screen, the DUAL BOOM SETUP SCREEN. Refer to Section xxx to continue setting up the dual boom.



Speed Cal Screen

1.1.7 SET THE SPEED CAL FACTOR:

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on SPEED CAL

Press SELECT MODE. Screen will change to SPEED CAL screen

1.1.8 AUTOMATIC SPEED CALIBRATION

Press SELECT MODE to begin wheel factor calculation. A star (*) will appear. next to PULSES

Drive forwards a set distance, say 100m. The pulse count should begin accumulating as you travel forwards

Once distance is reached, press SELECT MODE. Focus will automatically jump to DISTANCE line of the screen. Measure the distance travelled with a tape measure.

Use Inc/Dec (Up and down arrows) to change the distance travelled Press SELECT MODE to accept the value. Wheel factor will be automatically calculated and displayed.

Pressing reset during calibration will abort the calibration process.

1.1.9 MANUAL SPEED CALIBRATION

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on SPEED CAL

Press SELECT MODE. Screen will change to SPEED CAL screen

Press Dec (down arrow) until the focus is on SPEED CAL

Press SELECT MODE to edit the value

Use Inc/Dec (Up and down arrows) to change the wheel factor. Wheel factor changes in 1cm increments

Press SELECT MODE to accept the value

Press MENU to go back to previous Sprayer Setup Screen



Flow Cal Screen

1.1.10 SET THE FLOW CAL FACTOR:

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on FLOW CAL

Press SELECT MODE. Screen will change to FLOW CAL screen

1.1.11 AUTO MATIC FLOW CALIBRATION

Disconnect one of the section lines from the spray manifold
Place a bucket under the output of the section valve
Ensure the relevant section valve is turned on
Press SELECT MODE to begin flow factor calculation
The valve will open and fluid will begin to pump through the manifold. The
pulse count should begin accumulating as you meter out liquid
Once a sufficient volume has accumulated, press SELECT MODE. Focus will
automatically jump to ACTUAL FIOW line of the screen
Use Inc/Dec (Up and down arrows) to change the volume obtained
Press SELECT MODE to accept the value. Flow cal factor will be automatically
calculated and displayed.

Pressing reset during calibration will abort the calibration process

1.1.12 MANUAL FLOW CALIBRATION

Press Dec (down arrow) until the focus is on FLOW CAL Press SELECT MODE to edit the value Use Inc/Dec (Up and down arrows) to change the flow cal factor Press SELECT MODE to accept the value

Note: Press MENU to get back to the previous Sprayer Setup Screen once the calibration is finished.



Sprayer Setup 2 Screen

1.1.13 SETA MANUAL SPEED

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the screen changes to SPRAYER SETUP 2

Press Dec (down arrow) until focus is on MANUAL SPEED

Press SELECT MODE, A star(*) will appear after MANUAL

Use Inc/Dec (Up and down arrows) to set the manual speed. A value of OFF and number between 1 kph and 40kph can be set.

Press SELECT MODE, to accept changes

Note: the manual speed will not be able to be set if there is a valid speed source present, this can only be done whilst the vehicle is stationary. As soon as a valid speed is present this will override the manual speed. This value is not saved in memory, if the unit is turned off this value will need to be re-entered

1.1.14 ADJUST TO RATE INCREMENT

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the screen changes to SPRAYER SETUP 2

Press Dec (down arrow) until the focus is on RATE INCREMENT

Press SELECT MODE, star (*) will appear after RATE

Use Inc/Dec (Up and down arrows), to change rate increment value. Rate increment changes in 1 L/ha increments



Pressure Cal Screen

1.1.15 PRESSURE CALIBRATION

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the screen changes to SPRAYER SETUP 2

Press Dec (down arrow) until focus is on PRESSURE CAL

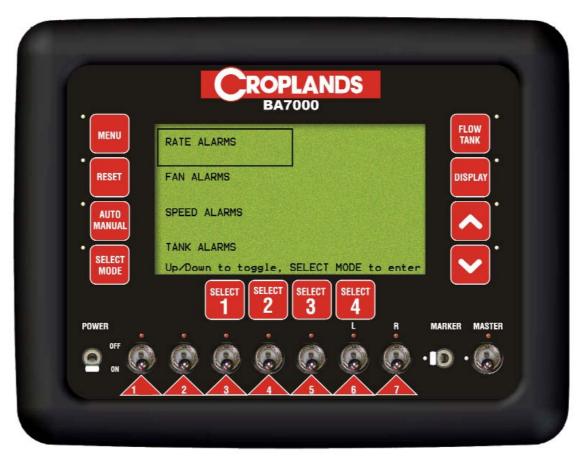
Press SELECT MODE, screen will change to Pressure Cal Screen. Focus window is on TURN PUMP OFF, physically turn pump off on the boomspray.

Once pump is turned off, Press SELECT MODE. The focus window will move to the next window IS PUMP OFF? then Press SELECT MODE. at this point the Eagle console is taking a zero point for the electronic pressure sensor while the pump is turned off

Next turn the pump on the boomspray on, and take the pump up to operating pressure, once at operating pressure, Press SELECT MODE the focus window will move to IS PUMP AT OPERATING PRESSURE, reminding the operator to have the pump at operating pressure.

Press SELECT MODE again to move the focus window to ACTUAL PRESSURE. Press SELECT MODE to edit the ACTUAL PRESSURE. A star (*) will appear. Press the Inc/Dec (up and down arrows) till the actual pressure is reading the same as the calculated pressure in the window to the right of the Actual Pressure. Press SELECT MODE to accept changes

2. ALARMS SETUPMENU



Alarms Screen

2.1 RATE ALARMS

2.1.1 TOGGLE THE MINIMUM FLOW ALARM

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press SELECT MODE to select RATE ALARMS

Press SELECT MODE to select MIN FLOW ALARM. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to toggle the alarm on/off

Press SELECT MODE to accept the changes

2.1.2 ADJUST THE MINIMUM FLOW ALARM POINT

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press SELECT MODE to select RATE ALARMS

If alarm is off, turn the alarm on as previously explained

Press Dec (down arrow) to move to the alarm point

Press SELECT MODE to edit the value. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to adjust the alarm point

Press SELECT MODE to accept the changes

2.1.3 TOGGLE THE APPLICATION RATE LOW ALARM

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press SELECT MODE to select RATE ALARMS

Press Dec (down arrow) until the focus is on APPL N RATE LOW

Press SELECT MODE to select APP N RATE LOW. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to topple the alarm on/off

2.1.4 ADJUST THE APPLICATION RATE LOW POINT

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press SELECT MODE to select RATE ALARMS

If alarm is off, turn the alarm on as previously explained

Press Dec (down arrow) to move to the alarm point

Press SELECT MODE to edit the value. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to adjust the alarm point

Press SELECT MODE to accept the changes

2.1.5 TOGGLE THE APPLICATION RATE HIGH ALARM

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press SELECT MODE to select RATE ALARMS

Press Dec (down arrow) until the focus is on APP N RATE HIGH

Press SELECT MODE to select APP N RATE HIGH. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to toggle the alarm on/off

Press SELECT MODE to accept the changes

2.1.6 ADJUST THE APPLICATION RATE HIGH POINT

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press SELECT MODE to select RATE ALARMS

If alarm is off, turn the alarm on as previously explained

Press Dec (down arrow) to move to the alarm point

Press SELECT MODE to edit the value. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to adjust the alarm point

2.2 FAN ALARMS



Fan Alarms Screen

2.2.1 TOGGLE THE FAN SPEED LOW ALARM

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on FAN ALARMS

Press SELECT MODE to select FAN ALARMS

Press SELECT MODE to select FAN SPEED LOW.A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to toggle the alarm on/off

Press SELECT MODE to accept the changes

2.2.2 ADJUST THE FAN SPEED LOW POINT

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on FAN ALARMS

Press SELECT MODE to select FAN ALARMS

If alarm is off, turn the alarm on as previously explained

Press Dec (down arrow) to move to the alarm point

Press SELECT MODE to edit the value. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to adjust the alarm point

Press SELECT MODE to accept the changes

2.2.3 TOGGLE THE FAN SPEED HIGH ALARM

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on FAN ALARMS

Press SELECT MODE to select FAN ALARMS

Press Dec (down arrow) until the focus is on FAN SPEED HIGH

Press SELECT MODE to select FAN SPEED HIGH. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to toggle the alarm on/off

2.2.4 ADJUST THE FAN SPEED HIGH POINT

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on FAN ALARMS

Press SELECT MODE to select FAN ALARMS

If alarm is off, turn the alarm on as previously explained

Press Dec (down arrow) to move to the alarm point

Press SELECT MODE to edit the value. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to adjust the alarm point

2.3 SPEED ALARMS



Speed Alarms Screen

2.3.1 TOGGLE THE SPEED LOW ALARM

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on SPEED ALARMS

Press SELECT MODE to select SPEED ALARMS

Press SELECT MODE to select SPEED LOW. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to toggle the alarm on/off

Press SELECT MODE to accept the changes

2.3.2 ADJUST THE SPEED LOW POINT

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on SPEED ALARMS

Press SELECT MODE to select SPEED ALARMS

If alarm is off, turn the alarm on as previously explained

Press Dec (down arrow) to move to the alarm point

Press SELECT MODE to edit the value. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to adjust the alarm point

Press SELECT MODE to accept the changes

2.3.3 TOGGLE THE SPEED HIGH ALARM

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on SPEED ALARMS

Press SELECT MODE to select SPEED ALARMS

Press Dec (down arrow) until the focus is on SPEED HIGH

Press SELECT MODE to select SPEED HIGH. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to toggle the alarm on/off

2.3.4 ADJUST THE SPEED HIGH POINT

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on SPEED ALARMS

Press SELECT MODE to select SPEED ALARMS

If alarm is off, turn the alarm on as previously explained

Press Dec (down arrow) to move to the alarm point

Press SELECT MODE to edit the value. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to adjust the alarm point

2.4 TANK ALARMS



Tank Alarms Screen

2.4.1 TOGGLE THE VOLUME LOW ALARM

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on TANK ALARMS

Press SELECT MODE to select TANK ALARMS

Press SELECT MODE to select VOLUME LOW. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to toggle the alarm on/off

Press SELECT MODE to accept the changes

2.4.2 ADJUST THE VOLUME LOW POINT

Press MENU

Press SELECT MODE to select SETUP

Press Dec (down arrow) until the focus is on ALARM SETUP

Press SELECT MODE to select ALARM SETUP

Press Dec (down arrow) until the focus is on TANK ALARMS

Press SELECT MODE to select TANK ALARMS

If alarm is off, turn the alarm on as previously explained

Press Dec (down arrow) to move to the alarm point

Press SELECT MODE to edit the value. A star(*) will be displayed

Use Inc/Dec (Up and down arrows) to adjust the alarm point

3. OPERATING HISTORY



Operating History Screen

3.1 TO TALS HISTO RY



Totals History Screen

3.1.1 RESET THE TOTAL VOLUME

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press SELECT MODE to select TO TAL VOLUME

Press RESET to clear the stored value

Press SELECT MODE to accept the changes

3.1.2 RESET THE SUB VOLUME

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press Dec (down arrow) until the focus is on SUB VOLUME

Press SELECT MODE to select SUB VOLUME

Press RESET to clear the stored value

Press SELECT MODE to accept the changes

3.1.3 RESET THE TOTAL AREA

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press Dec (down arrow) until the focus is on TOTALAREA

Press SELECT MODE to select TO TALAREA

Press RESET to clear the stored value

Press SELECT MODE to accept the changes

3.1.4 RESET THE SUB AREA

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press Dec (down arrow) until the focus is on SUB AREA

Press SELECT MODE to select SUB AREA

Press RESET to clear the stored value

3.1.5 RESET THE TOTAL DISTANCE

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press Dec (down arrow) until the focus is on TOTAL DISTANCE

Press SELECT MODE to select TO TAL DISTANCE

Press RESET to clear the stored value

Press SELECT MODE to accept the changes

3.1.6 RESET THE SUB DISTANCE

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press Dec (down arrow) until the focus is on SUB DISTANCE

Press SELECT MODE to select SUB DISTANCE

Press RESET to clear the stored value

Press SELECT MODE to accept the changes

3.1.7 RESET THE TOTAL TIME

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press Dec (down arrow) until the focus is on TOTAL TIME

Press SELECT MODE to select TO TAL TIME

Press RESET to clear the stored value

Press SELECT MODE to accept the changes

3.1.8 CHANGE TO A DIFFERENT SUB AREA

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press Dec (down arrow) until the focus is on SUB AREANUMBER

Press SELECT MODE to select SUB AREANUMBER

Use Inc/Dec (Up and down arrows) to adjust the current sub area

3.2 FAN HISTORY

These values are display values only, they are not editable by the user



Fan History Screen

3.3 MACHINE HISTORY

To enter the Machine History screen you must enter the machine unique pin number. If the number is entered incorrectly, you will be returned to the operating history screen.

The numbers displayed are machine totals, these can t be edited or reset.

3.31 ENTER THE MACHINE HISTORY SCREEN

Press MENU

Press Dec (down arrow) until the focus is on OPERATING HISTORY

Press SELECT MODE to select OPERATING HISTORY

Press Dec (down arrow) until the focus is on MACHINE HISTORY

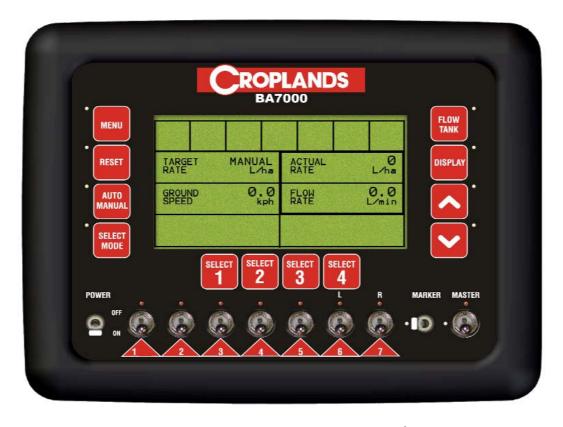
Press SELECT MODE to select MACHINE HISTORY

Enter your pin number

Machine History Screen

PROBABLY DELETE PAGE

4. OPERATIONS: SPRAYER



Runtime Screen

4.1 OPERATION OF THE SPRAYER

4.1.1 DISPLAY THE VOLUME REMAINING IN THE TANK

Press FLOW/TANK The LED appears next to FLOW TANK when displaying VOLUME LEFT
The ACTUAL RATE changes to Volume Left

To change back, press FLOW/TANK

4.1.2 FILL THE TANK

Press FLOW/TANK to togale to Volume Left

Press RESET.A prompt appears in the bottom left of the screen

Press SELECT MODE to reset the volume

4.1.3 TOGGLE BETWEEN MANUALAND AUTO

Press AUTO/MANUAL

If the unit is in AUTO mode, the LED next to the button is illuminated and the TARGET RATE will display a numerical value

If the unit is in MANUAL mode the LED is not illuminated and MANUAL is displayed in the TARGET RATE area

4.1.4 TOGGLE BETWEEN FLOW RATE, PUMP SPEED and LIQUID PRESSURE

Press DISPLAY to toggle between the display modes

If the unit is in FLOW RATE mode, the LED next to the button is not
illuminated, FLOW RATE is displayed and the actual FLOW RATE is shown in L/min

If the unit is in FLMP SPEED mode the LED is illuminated, PUMP SPEED is
displayed and the actual pump rpm is displayed

If the unit is in LIQUID PRESSURE mode the LED is illuminated, LIQUID PRESSURE is
displayed and the actual PRESSURE is displayed IN kPa.

Press DISPLAY again to display FLOW RATE.

4.1.5 TURN A SECTION ON

Adjust the switch for the required section to the on (down) position

If the Master switch is off, the indicator IED for the section will flash

If the Master switch is on the indicator IED will be illuminated and a spray nozzle will be shown at the top of the screen

4.2 TO BEGIN SPRAYING

Ensure any required sections are turned on Turn the MASTER switch on

4.2.1 INCREASE OR DECREASE THE APPLICATION RATE (Manual Mode)

Ensure the master switch is on and any required sections are on Press INC/DEC. The regulator valve will operate and you will see the actual rate change accordingly

4.2.2 INCREASE OR DECREASE THE APPLICATION RATE (Auto Mode)

Ensure the unit is in AUTO mode as previously described

Press INC/DEC. The target rate will change by the selected increment amount

4.2.3 CHOOSE A PRESET APPLICATION RATE (Auto Mode)

Ensure the unit is in AUTO mode as previously described

Press SELECT 2 to set the focus to the TARGETRATE

Press SELECTMODE

The four preset rates will appear in the bottom left-hand window of the console

Press the SELECT1, 2, 3 or 4 button that relates to the required rate

The target rate will change to the chosen preset rate

5. DUAL BOOM SETUP

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

If the boomspray is a single line boom then the value should be OFF, and there is no further setup required for the DUAL BOOM option

Press SELECT MODE, if the boom spray is a DUAL BOOM; to advance to the next screen, the DUAL BOOM SETUP SCREEN.

Press SELECT MODE. A star(*) will appear next to DUAL.

Press Inc/Dec(up and down arrows) to toggle between ON/OFF



Dual Boom Setup

6. DUAL BOOM SETUP USING SPEED SWITCHING MODE

6.1 TOGGLE DUAL BOOM

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press SELECT MODE. A star(*) will appear next to DUAL.

Press Inc/Dec(up and down arrows) to toggle between ON/OFF. Select ON

Press SELECT MODE to accept changes.

6.2 PRIMARY BOOM SETUP

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to PRIMARY BOOM

Press SELECT MODE.A star(*) will be displayed next to PRIMARY

Press Inc/Dec to toggle between FRONT and BACK

Press SELECT MODE to accept changes.

6.3 SWITCHING MODE SETUP(SPEED, FLOW AND PRESSURE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to SWITCHING MODE

Press SELECT MODE.A star(*) will be displayed next to SWITCHING

Press Inc/Dec to toggle between SPEED, FLOW and PRESSURE. Select SPEED

6.4 SWITCHING ORDER SETUP

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to SWITCHING ORDER

Press SELECT MODE.A star(*) will be displayed next to SWITCHING

Press Inc/Dec to toggle between P,B and P,S,B. When P,B is selected means the primary boom will switch first, then both booms will switch on. When P,S,B is selected the primary boom will switch on, then when the first switching point is reached the secondary boom will switch on (and primary boom will switch off); then when the second switching point is reached both booms (primary and secondary) will switch on

Note: SWITCH ON TIMER and SWITCH OFF TIMER options are only available when P,S,B is selected

Press SELECT MODE to accept changes.

6.5 SET SWITCHING POINTS

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move the focus to SET SWITCHING POINTS

Press SELECT MODE. to advance to SWITCHING SETUP screen

Note: The SECD LINE SWITCHING option is only available when P,S,B is selected, in the SWITCHING ORDER option. When P,S,B is selected, 2 switching points have to be entered (SECD LINE SWITCHING and DUAL LINE SWITCHING). When P,B is selected only one switching point has to be entered (DUAL LINE SWITCHING)

Press SELECT MODE with the focus window on SECD LINE SWITCHING.A star(*) will appear.

Press Inc/Dec (up and down arrows) to edit the value for the second line switching point

Press SELECT MODE to accept changes.

Press Inc/Dec (up and down arrows) to move the focus to DUAL LINE SWITCHING Press SELECT MODE with the focus window on DUAL LINE SWITCHING.A star(*) will appear.

Press Inc/Dec (up and down arrows) to edit the value for the dual line switching point

6.6 SET SWITCH ON TIMER AND SWITCH OFF TIMER

Note SET SWITCH ON and SWITCH OFF TIMER is only displayed when P,S,B is selected in the SWITCHING ORDER, $\underline{\text{refer Section 5.1.4}}$

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move the focus to SWITCH ON TIMER

Press SELECT MODE. A star(*) will be displayed next to SWITCH ON

Press Inc/Dec (up and down arrows) to edit the value for the SWITCH ON TIMER.

The value is entered in milliseconds (mS), 500 milliseconds equals 1/2 a second and 1000 milliseconds equals 1 second.

Press SELECT MODE to accept changes

Press Inc/Dec (up and down arrows) to move the focus to SWITCH OFF TIMER

Press SELECT MODE. A star(*) will be displayed next to SWITCH OFF

Press Inc/Dec (up and down arrows) to edit the value for the SWITCH OFF TIMER.

The value is entered in milliseconds (mS), 500 milliseconds equals 1/2 a second and 1000 milliseconds equals 1 second.

7. DUAL BOOM SETUP USING FLOW SWITCHING MODE

7.1. TOGGLE DUAL BOOM

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press SELECT MODE. A star(*) will appear next to DUAL.

Press Inc/Dec(up and down arrows) to toggle between ON/OFF. Select ON

Press SELECT MODE to accept changes.

7.2 PRIMARY BOOM SETUP

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to PRIMARY BOOM

Press SELECT MODE.A star(*) will be displayed next to PRIMARY

Press Inc/Dec to toggle between FRONT and BACK

Press SELECT MODE to accept changes.

7.3 SWITCHING MODE SETUP (SPEED, FLOW AND PRESSURE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to SWITCHING MODE

Press SELECT MODE.A star(*) will be displayed next to SWITCHING

Press Inc/Dec to toggle between SPEED, FLOW and PRESSURE. Select FLOW

7.4 SWITCHING ORDER SETUP

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to SWITCHING ORDER

Press SELECT MODE.A star(*) will be displayed next to SWITCHING

Press Inc/Dec to toggle between P,B and P,S,B. When P,B is selected means the primary boom will switch first, then both booms will switch on. When P,S,B is selected the primary boom will switch on, then when the first switching point is reached the secondary boom will switch on(and primary boom will switch off); then when the second switching point is reached both booms (primary and secondary) will switch on

Note: SWITCH ON TIMER and SWITCH OFF TIMER options are only available when P,S,B is selected

7.5 SET SWITCHING POINTS (FLOW) MENU



Flow Switching Setup Menu

7.5.1 FRONT LINE NOZZLES SETUP



Front Line Nozzles Setup Screen

7.5.1a SET MINIMUM FLOW FOR NOZZLES (FRONTLINE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SET SWITCHING POINTS(FLOW) MENU

screen

Press SELECT MODE to select FRONT LINE NOZZLES

Press SELECT MODE. A star(*) will be displayed after MIN

Press Inc/Dec(up and down arrows) to change the MIN FLOW

Press SELECT MODE to accept changes

7.5.1b SET MAXIMUM FLOW FOR NOZZLES (FRONTLINE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SET SWITCHING POINTS (FLOW) MENU screen

Press SELECT MODE to select FRONT LINE NOZZLES

Press Dec (down arrow) until focus is on MAX FLOW

Press SELECT MODE. A star(*) will be displayed after MAX

Press Inc/Dec(up and down arrows) to change the MAX FLOW

7.5.1c SET NUMBER OF NOZZLES FOR EACH SECTION FOR FLOW SWITCHING (FRONTLINE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SET SWITCHING POINTS (FLOW) MENU

Press SELECT MODE to select FRONT LINE NOZZLES

Write down the number of nozzles on each section on the FRONTLINE of the boomspray, with section 1 being on the left hand side of the boomspray. The number of sections are set from the factory. If your boomspray has 5 sections then there will be 5 sections displayed on the screen to enable the number of nozzles for each of the 5 sections to be entered. If the boomspray has 7 sections then 7 sections will be displayed on the screen. As the number of nozzles are being entered then the TOTAL NOZZLES will tally the total number of nozzles on the boomspray, displayed on the top right hand of the screen.

Press Dec (down arrow) until focus is on NOZZLES, for section 1

Press SELECT MODE. A star(*) will be displayed.

Press Inc/Dec(up and down arrows) to enter in the number of nozzles for section 1 Press SELECT MODE to accept changes

Press Dec (down arrow) once so the focus is on NOZZLES for section 2

Press SELECT MODE. A star(*) will be displayed.

Press Inc/Dec(up and down arrows) to enter in the number of nozzles for section 2 Press SELECT MODE to accept changes

Enter the number of nozzles for each section

Repeat the above procedure and enter the number of nozzles for the remaining sections

7.5.2 BACK LINE NOZZLES SETUP



Back Line Nozzles Setup Screen

7.5.2a SET MINIMUM FLOW FOR NOZZLES (BACKLINE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SET SWITCHING POINTS (FLOW) MENU

screen

Press Dec (down arrow) until focus is on BACK LINE NOZZLES

Press SELECT MODE to select BACK LINE NOZZLES

Press SELECT MODE. A star(*) will be displayed after MIN

Press Inc/Dec(up and down arrows) to change the MIN FLOW

Press SELECT MODE to accept changes

7.5.2b SET MAXIMUM FLOW FOR NOZZLES (BACKLINE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SET SWITCHING POINTS(FLOW) MENU

screen

Press Dec (down arrow) until focus is on BACK LINE NOZZLES

Press SELECT MODE to select BACK LINE NOZZLES

Press Dec (down arrow) until focus is on MAX FLOW

Press SELECT MODE. A star(*) will be displayed after MAX

Press Inc/Dec(up and down arrows) to change the MAX FLOW

7.5.2c SET NUMBER OF NOZZLES FOR EACH SECTION FOR FLOW SWITCHING (BACKLINE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SET SWITCHING POINTS(FLOW) MENU screen

Press Dec (down arrow) until focus is on BACK LINE NOZZLES

Press SELECT MODE to select BACK LINE NOZZLES

Write down the number of nozzles on each section on the BACKLINE of the boomspray, with section 1 being on the left hand side of the boomspray. The number of sections are set from the factory. If your boomspray has 5 sections then there will be 5 sections displayed on the screen to enable the number of nozzles for each of the 5 sections to be entered. If the boomspray has 7 sections then 7 sections will be displayed on the screen. As the number of nozzles are being entered then the TOTAL NOZZLES will tally the total number of nozzles on the boomspray, displayed on the top right hand of the screen.

Press Dec (down arrow) until focus is on NOZZLES, for section 1

Press SELECT MODE. A star(*) will be displayed.

Press Inc/Dec(up and down arrows) to enter in the number of nozzles for section 1 Press SELECT MODE to accept changes

Press Dec (down arrow) once so the focus is on NOZZLES for section 2

Press SELECT MODE. A star(*) will be displayed.

Press Inc/Dec(up and down arrows) to enter in the number of nozzles for section 2 Press SELECT MODE to accept changes

Enter the number of nozzles for each section

Repeat the above procedure and enter the number of nozzles for the remaining sections

7.5.3 DUAL LINE SWITCHING (FLOW)



Dual Line Switching(Flow) Screen

7.5.3a DUAL LINE SWITCHING VALUES (FLOW)

The values for MIN FLOW FRONT, MAX FLOW FRONT, MIN FLOW FRONT, MAX FLOW BACK, COMBINED MIN FLOW and COMBINED MAX FLOW are not editable from this screen but are displayed to help the operator set the SECD LINE SWITCHING and DUAL LINE SWITCHING points.

The MIN FLOW FRONT value is derived from the value set in the MIN FLOW(FRONT) Refer Section 7.5.1a and the total number of nozzles on the front line. Example 0.30 L/min(MIN FLOW-FRONT) X 112(Nozzles) = 33.60 L/min

The MAX FLOW FRONT value is derived from the value set in the MAX FLOW(FRONT) <u>Refer Section 7.5.1b</u> and the total number of nozzles on the front line.

The MIN FLOW BACK value is derived from the value set in the MIN FLOW (BACK) Refer Section 7.5.2a and the total number of nozzles on the back line.

The MAX FLOW BACK value is derived from the value set in the MAX FLOW(BACK) Refer Section 7.5.2b and the total number of nozzles on the back line.

The COMBINED MIN FLOW is derived from adding the values of MIN FLOW FRONT and the MIN FLOW BACK.

The COMBINED MAX FLOW is derived from adding the values of MAX FLOW FRONT and the MAX FLOW BACK.

7.5.3b SETTING SECOND LINE SWITCHING POINT (FLOW)

Note SECD LINE SWITCHING only appears on the Dual Line Switching Screen when P,S,B is selected in the SWITCHING ORDER setup. Refer Section 7.4

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SET SWITCHING POINTS (FLOW) MENU

Press Dec (down arrow) until focus is on DUAL LINE SWITCHING

Press SELECT MODE to select DUAL LINE SWITCHING

Press SELECT MODE with the focus window on SECD LINE SWITCHING.A star(*) is displayed.

Press Inc/Dec(up and down arrows) to adjust the SECD LINE SWITCHING point.

Press SELECT MODE to accept changes

7.5.3c SETTING DUAL LINE SWITCHING POINT (FLOW)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SET SWITCHING POINTS(FLOW) MENU screen

Press Dec (down arrow) until focus is on DUAL LINE SWITCHING

Press SELECT MODE to select DUAL LINE SWITCHING

Press Dec (down arrow) until the focus is on DUAL LINE SWITCHING

Press SELECT MODE with the focus window on DUAL LINE SWITCHING.A star(*) is displayed.

Press Inc/Dec(up and down arrows) to adjust the SECD LINE SWITCHING point.

7.6 SET SWITCH ON TIMER AND SWITCH OFF TIMER

Note SET SWITCH ON and SWITCH OFF TIMER is only displayed when P,S,B is selected in the SWITCHING ORDER, $\underline{\text{refer Section 7.4}}$

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move the focus to SWITCH ON TIMER

Press SELECT MODE. A star(*) will be displayed next to SWITCH ON

Press Inc/Dec (up and down arrows) to edit the value for the SWITCH ON TIMER.

The value is entered in milliseconds (mS), 500 milliseconds equals 1/2 a second and 1000 milliseconds equals 1 second.

Press SELECT MODE to accept changes

Press Inc/Dec (up and down arrows) to move the focus to SWITCH OFF TIMER

Press SELECT MODE. A star(*) will be displayed next to SWITCH OFF

Press Inc/Dec (up and down arrows) to edit the value for the SWITCH OFF TIMER.

The value is entered in milliseconds (mS), 500 milliseconds equals 1/2 a second and 1000 milliseconds equals 1 second.

8 DUAL BOOM SETUPUSING PRESSURE SWITCHING MODE

8.1. TOGGLE DUAL BOOM

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press SELECT MODE. A star(*) will appear next to DUAL.

Press Inc/Dec(up and down arrows) to toggle between ON/OFF. Select ON

Press SELECT MODE to accept changes.

8.2 PRIMARY BOOM SETUP

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to PRIMARY BOOM

Press SELECT MODE.A star(*) will be displayed next to PRIMARY

Press Inc/Dec to toggle between FRONT and BACK

Press SELECT MODE to accept changes.

8.3 SWITCHING MODE SETUP (SPEED, FLOW AND PRESSURE)

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to SWITCHING MODE

Press SELECT MODE.A star(*) will be displayed next to SWITCHING

Press Inc/Dec to toggle between SPEED, FLOW and PRESS. Select PRESS

8.4 SWITCHING ORDER SETUP

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move focus to SWITCHING ORDER

Press SELECT MODE.A star(*) will be displayed next to SWITCHING

Press Inc/Dec to toggle between P,B and P,S,B.

When P,B is selected means the primary boom will switch first; then both booms will switch on once the Dual Line Switching point has been reached.

When P,S,B is selected the primary boom will switch on, then when the first switching point (Secondary Line Switch) is reached the secondary boom will switch on (and primary boom will switch off); then when the Dual Line Switching point is reached both booms (primary and secondary) will switch on.

Note: SWITCH ON TIMER and SWITCH OFF TIMER options are only available when P,S,B is selected

8.5 SET SWITCHING POINTS (PRESSURE)

Note if the operator selected P,B in the SWITCHING ORDER then <u>Go To Section</u> <u>8.5.1</u> to setup the SWITCHING POINTS for pressure switching.

Note if the operator selected P,S,B in the SWITCHING ORDER then <u>Go To Section</u> <u>8.5.2</u> to setup the SWITCHING POINTS for pressure switching.

8.5.1 SET SWITCHING POINTS WHEN P,B IS SELECTED

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to PRESSURE SWITCHING SETUP screen

Press SELECT MODE with the focus window on DUAL LINE SWITCH ON. A star(*) will be displayed.

Press Inc/Dec (up and down arrows) to edit the value for the DUAL LINE SWITCH ON point

Press SELECT MODE to accept changes.

Press Dec (down arrow) to move focus to DUAL LINE SWITCH OFF

Press SELECT MODE with the focus window on DUAL LINE SWITCH OFF.A star(*) will be displayed.

Press Inc/Dec (up and down arrows) to edit the value for the DUAL LINE SWITCH OFF point

8.5.2 SET SWITCHING POINTS WHEN P,S,B IS SELECTED

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Dec (down arrow) to move the focus to SET SWITCHING POINTS

Press SELECT MODE.to advance to SWITCHING SETUP(PRESSURE) screen

Press SELECT MODE with the focus window on SECD LINE SWITCH ON. A star(*) will be displayed.

Press Inc/Dec (up and down arrows) to edit the value(in kPa) for the SECD LINE SWITCH ON point

Press SELECT MODE to accept changes.

Press Dec (down arrow) to move the focus to DUAL LINE SWITCH ON Press SELECT MODE with the focus window on DUAL LINE SWITCH ON. A star(*) will be displayed.

Press Inc/Dec (up and down arrows) to edit the value(in kPa) for the DUAL LINE SWITCH ON point

Press SELECT MODE to accept changes.

Press Dec (down arrow) to move the focus to SECD LINE SWITCH OFF. Press SELECT MODE with the focus window on SECD LINE SWITCH OFF. A star(*) will be displayed.

Press Inc/Dec (up and down arrows) to edit the value(in kPa) for the SECD LINE SWITCH OFF point

Press SELECT MODE to accept changes.

Press Dec (down arrow) to move the focus to DUAL LINE SWITCH OFF. Press SELECT MODE with the focus window on DUAL LINE SWITCH OFF. A star(*) will be displayed.

Press Inc/Dec (up and down arrows) to edit the value (in kPa), for the DUAL LINE SWITCH OFF point

8.6 SET SWITCH ON TIMER AND SWITCH OFF TIMER

Note: SWITCH ON TIMER and SWITCH OFF TIMER options are only available when P,S,B option is selected in SWITCHING ORDER

Press MENU

Press SELECT MODE to select SETUP

Press SELECT MODE to select SPRAYER SETUP

Press Dec (down arrow) until the focus is on DUAL BOOM

Press SELECT MODE to advance to DUAL BOOM SETUP screen

Press Inc/Dec (up and down arrows) to move the focus to SWITCH ON TIMER

Press SELECT MODE. A star(*) will be displayed next to SWITCH ON

Press Inc/Dec (up and down arrows) to edit the value for the SWITCH ON TIMER.

The value is entered in milliseconds (mS), 500 milliseconds equals 1/2 a second and 1000 milliseconds equals 1 second.

Press SELECT MODE to accept changes

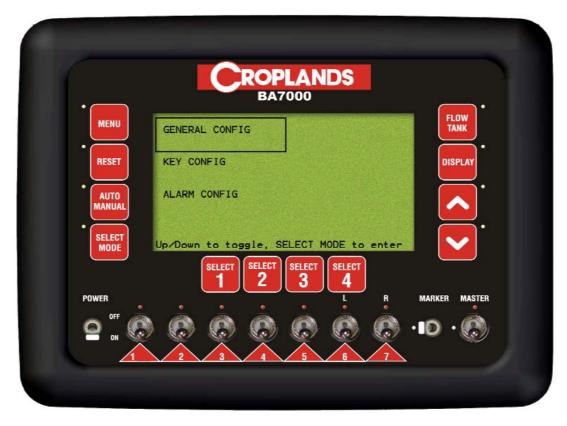
Press Inc/Dec (up and down arrows) to move the focus to SWITCH OFF TIMER

Press SELECT MODE. A star(*) will be displayed next to SWITCH OFF

Press Inc/Dec (up and down arrows) to edit the value for the SWITCH OFF TIMER.

The value is entered in milliseconds (mS), 500 milliseconds equals 1/2 a second and 1000 milliseconds equals 1 second.

9. CONFIGURATION OPTIONS



General Configuration Screen

9.1 EXTRA CONFIGURATION OPTIONS

To access the extra console related configuration options, hold down the RESET button while the unit is first starting up.

9.1.1 ENTER DIAGNOSTICS MODE

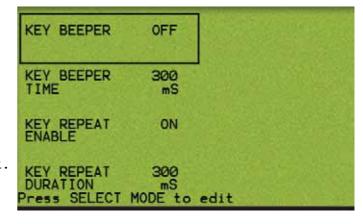
Press SELECT MODE to select GENERAL CONFIG Press SELECT MODE to select DIAGNOSTICS MODE See the following page for details on the diagnostics screen

9.1.2 RESTORE TO FACTORY SETTINGS

Press SELECT MODE to select GENERAL CONFIG
Press Dec (down arrow) to set the focus to COLD RESET
Press SELECT MODE to select COLD RESET
Press SELECT MODE to accept
All values will revert to factory settings

9.1.3 TOGGLE THE KEYBEEPER

Press Dec (down arrow) until the focus is on BEEPER CONFIG
Press SELECT MODE to select BEEPER
CONFIG
Press SELECT MODE to select KEY BEEPER.
A star(*) will be displayed
Press INC/DEC to toggle the beeper state
Press SELECT MODE to accept changes



Key Beeper Screen

9.1.4 CHANGE THE KEY BEEPER TIME

Press Dec (down arrow) until the focus is on BEEPER CONFIG
Press SELECT MODE to select BEEPER CONFIG
Press Dec (down arrow) until the focus is on KEY BEEPER TIME
Press SELECT MODE to select KEY BEEPER TIME. A star(*) will be displayed
Press INC/DEC to change the beeper time
Press SELECT MODE to accept changes

9.1.5 TOGGLE THE KEY REPEAT

Press Dec (down arrow) until the focus is on BEEPER CONFIG
Press SELECT MODE to select BEEPER CONFIG
Press Dec (down arrow) until the focus is on KEY REPEAT ENABLE
Press SELECT MODE to select KEY REPEAT ENABLE. A star will be displayed
Press INC/DEC to change the state of the key repeat
Press SELECT MODE to accept changes

9.1.6 ADJUST THE KEY REPEAT DURATION

Press Dec (down arrow) until the focus is on BEEPER CONFIG
Press SELECT MODE to select BEEPER CONFIG
Press Dec (down arrow) until the focus is on KEY REPEAT DURATION
Press SELECT MODE to select KEY REPEAT DURATION. A star(*) will be displayed
Press INC/DEC to change the key repeat duration
Press SELECT MODE to accept changes

9.1.7 CHANGE THE ALARM CYCLE TIME:

Press Dec (down arrow) until the focus is on ALARM CONFIG

Press SELECT MODE to select ALARM CONFIG

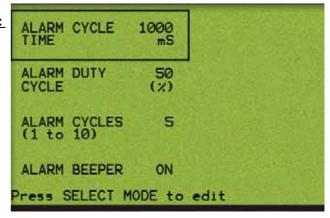
Press SELECT MODE to select ALARM CYCLE TIME. A star(*) will be displayed

Press INC/DEC to change the alarm cycle time

Press SELECT MODE to accept changes

9.1.8 CHANGE THE ALARM DUTY CYCLE:

Press Dec (down arrow) until the focus is on ALARM CONFIG
Press SELECT MODE to select ALARM CONFIG
Press Dec (down arrow) until the focus is on
ALARM DUTY CYCLE
Press SELECT MODE to select ALARM DUTY
CYCLE. A star(*) will be displayed
Press INC/DEC to change the alarm duty cycle
Press SELECT MODE to accept changes



Alarm Configuration Screen

9.1.9 CHANGE THE NUMBER OF ALARM CYCLES:

Press Dec (down arrow) until the focus is on ALARM CONFIG
Press SELECT MODE to select ALARM CONFIG
Press Dec (down arrow) until the focus is on ALARM CYCLES
Press SELECT MODE to select ALARM CYCLES. A star(*) will be displayed
Press INC/DEC to change the number of alarm cycles
Press SELECT MODE to accept changes

9.1.10 TOGGLE THE ALARM BEEPER ON/OFF

Press Dec (down arrow) until the focus is on ALARM CONFIG
Press SELECT MODE to select ALARM CONFIG
Press Dec (down arrow) until the focus is on ALARM BEEPER
Press SELECT MODE to select ALARM BEEPER. A star(*) will be displayed
Press INC/DEC to toggle the alarm beeper
Press SELECT MODE to accept changes

10. DIAGNOSTICS MODE



Diagnostics Menu

10.1 LED TEST:

Select this to check the operation of the LED's on the front panel Press enter to begin, the LED's will cycle around the front panel



LED Diagnostics Screen

10.2 SWITCH TEST:

Select this to check the operation of the switches

The state of each switch is displayed along the bottom of the screen

To test the operation of a switch, toggle the switch up and down

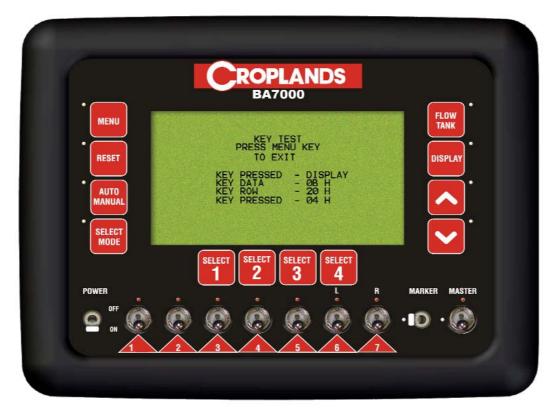
The state of the switch should be displayed correctly on the screen



Switch Diagnostics Screen

10.3 KEYS TEST:

Select this to check the operation of the buttons on the front panel Press any button and the button press should be displayed on the screen



Keys Diagnostics Screen

10.4 SENSORS TEST:

Select this to check the operation of the sensor circuitry

The period (time between pulses) for each sensor will be displayed on the screen



Sensors Diagnostics Screen

10.5 RELAYS TEST:

Select this to check the operation of the section relays Relays switch on in a preset order



Relays Diagnostics Screen

10.6 REG VALVE TEST:

Select this to check the operation of the reg valve The value will automatically open and close



Reg Valve Diagnostics Screen

10.7 EEPROM TEST:

Select this to check the EEPROM READ/WRITE functions EEPROM is automatically written to and read from. An error message will be displayed if not working properly.



EEPROM Diagnostics Screen

10.8 DISPLAY TEST:

Select this to check each pixel of the screen The screen slowly floods back, from left to right Press MENU to exit



Display Diagnostics Screen

Personal Notes	

Personal Notes



CROPLANDS CUSTOMER SERVICE

Email: sales@croplands.com.au W ebsite: www.croplands.com.au

AUSTRALIA Freecall 1800 999 162

Free Fax 1800 623 778

NEW ZEALAND Freecall 0800 106 898