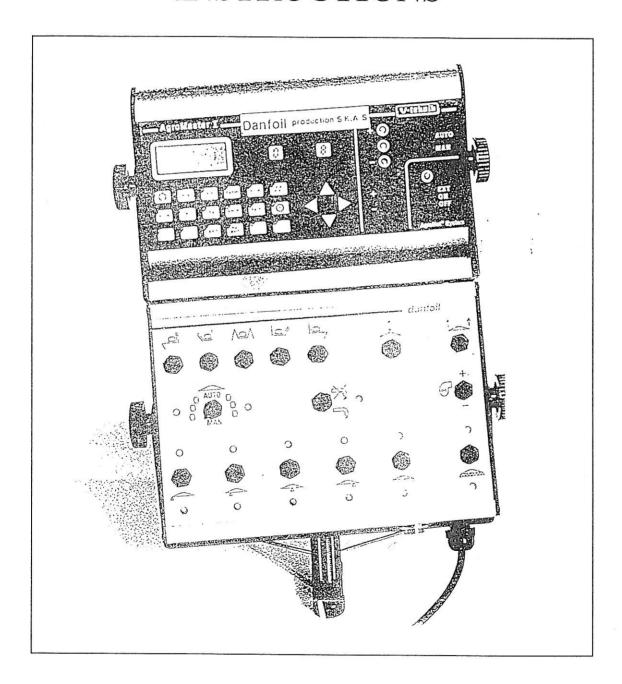
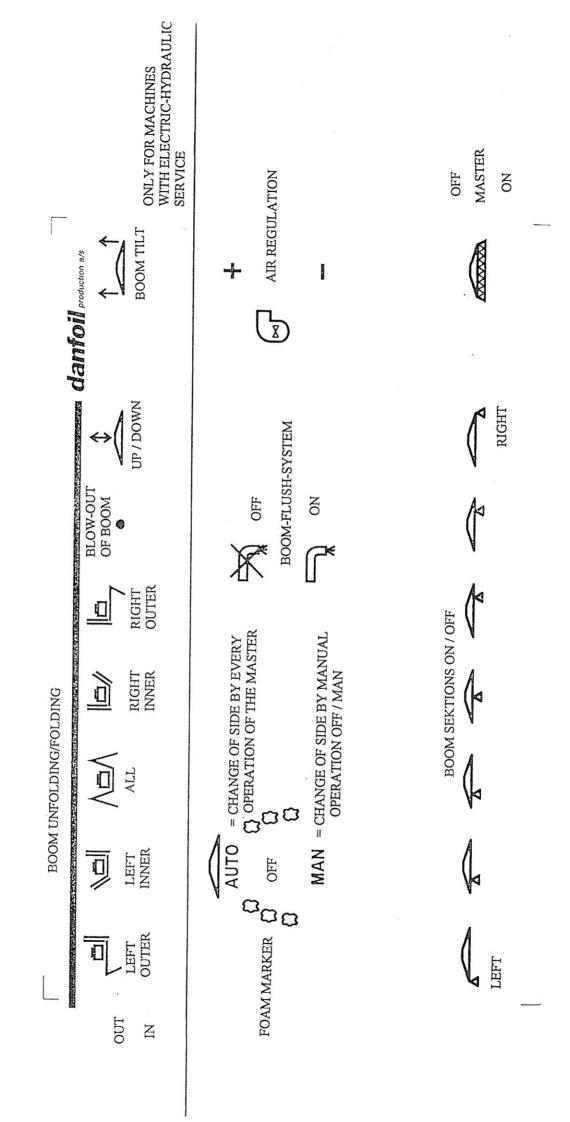
10. Operation of Monitor

AgroMaster

INSTRUCTIONS





DESCRIPTION

r		
	Circumference of wheel in mm per Number of magnets	For input of data, please study page 4
m/s	Wind velocity m/sec	
/tot	Sprayed litre total	Reset, by pushing RESET and the ÷ switch simultaneously.
ha tot	Total number of ha sprayed	Reset, by pushing RESET and the ÷ switch simultaneously.
$\left \begin{array}{c} \\ \end{array} \right $	Measurement of distance in meters	Reset, by pushing RESET
[#	Storage of data (special equipment)	
\longleftrightarrow	Working width in cm (+ partial widths)) For input, please study page 4
r/min	Revolutions per minute	
/ha	Actual liquid volume, litres/ha	
km/h	Speed, km/h	
ha/h	Actual area sprayed, ha/h	
	Measurement of time, hours and minutes	s Reset, by pushing RESET
/part	Liquid volume, litres ("trip")	Reset, by pushing RESET
ha port	Sprayed area ("trip")	Reset, by pushing RESET
		Utilised to select the desired display for input of data
	Set:	Operated before and after input of data

Operated at *reset* of data, e.g. litres and

hectares

00:00 Display

Reset:

DESCRIPTION



AUTO

in **AUTO**, the sprayer is operating with dosage depending of driving.

MAN

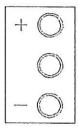
in MAN, the driver controls the dosage by operating

the +/÷ switch



+

At **AUTO** dosage, the dosage is increased/reduced by 10% each time the switch is pushed (10% in proportion to the desired dosage, stored in the monitor).



These lamps indicate whether the monitor recommends a larger or a smaller dosage. The central lamp (green) indicates a correct dosage.

The area counter

The green lamp indicates that the area counter is active.



EXT:

The area counter is controlled automatically from the

sprayer.

EXT

during spraying, the EXT must be switched on.

ON

OFF

The area counter is active all the time.

OFF:

ON:

The area counter has stopped.

Storing data into the monitor is always done as follows:

- A. The wanted display (function) is activated by means of the Function Selectors
- B. Press SET [3] and the +switch simultaneously and the last number in the Display flashes.
- C. Store the wanted data by using the Function Selectors:

Indicator up:

The flashing number increases.

Indicator down:

The flashing number decreases.

Indicator left/right:

Activates the next number.

D. Always end the storage of data by pushing SET 2 . Now the light in the display is constant.

A) Storage of Circumference of Wheel (in mm)

It is necessary to store the exact distance covered by each wheel, when the tractor is driving in the field = the impulse transferred from the wheel to the monitor.

- A. In the field is measured a distance of 50 or 100 metres.
- B. Activate the display Press SET [3] and the +switch. Code ex. 600 mm (1/8 of the circumference. End the operation by SET [5].
- C. Activate the display \longrightarrow , and reset the display by pushing RESET \bigcirc .
- **D.** Drive along the measured distance.
- E. Stand still. The monitor now has to show 50 or 100 metres (the measured distance).
- F. If this is not the case the is activated and the circumference is changed (see point B). Activate the display for control. Repeat until agreement is achieved.

B) Storage of Working Width (in cm)

- A. Activate the display \longleftrightarrow . All boom sections has to be opened (also the main switch).
- **B.** Store the working width of the sprayer in cm. Follow the input instructions as described on page 3.

Storage of the partial widths of the boom:

The partial widths must be stored, enabling the monitor to register the correct area and to apply the right liquid volume, e.g. when spraying wedges.

Example: Working width: 2400 cm.

Partial widths: 600 - 400 - 400 - 400 - 600 cm. The correct partial widths can be seen on page 2 in the manual.

C. The display \longleftrightarrow should still be active and all boom sections open for liquid supply (remember the main switch).

- **D.** Turn off the switch for the left outer boom section. The display shows 2400 and is flashing (:), indicating that one or more boom sections are closed.
- E. Push SET [and the +switch, and store 1800 (2400 600), as the remaining working width. Conclude by pushing SET [a]. Activate the switch for this boom section once again and the display shows 2400.
- F. Turn off the switch for the next boom section (400), push SET and the +switch and store 2000. Conclude by pushing SET . The switch is turned on once more.
- G. The remaining boom sections are stored by following the same procedure. Only 1 boom section is to be closed at the time.
- H. After having stored the partial widths, we recommend the following as **control**: When all boom sections are open the display has to show 2400. Thereupon, all boom section are closed slowly one by one, reducing the displayed width for each closed boom section. When all boom sections are closed, the display has to show 0.

N.B.: It indicates an error in the stored data, if E-54 occurs on the display.

C) Calibration of Flow Gauge

It is necessary to identify and store the right flow value, so that the monitor is able to register the applied liquid volume correctly. The flow value indicates the number of impulses given by the flow gauge per each litre of applied liquid. The flow gauge only registers the amount of liquid actually sprayed through the boom.

Storage of Flow Value

- A. Activate the display /tot
- B. Push SET [3] and the +switch. This action causes the last number on the display to flash. At the same time, any previously stored flow value is displayed.
- C. If the flow value is unknown, please input 80 as flow value.
- **D.** Conclude by pushing SET [8]

Calibration of Flow Gauge

When calibrating the flow gauge, the sprayer must be placed securely on the supporting legs on a firm foundation. This ensures a precise reading on the tank.

- E. The tank of the sprayer is filled almost completely with water (approx. 700 l.). The pump is started and all boom sections are opened, allowing the spraying system to be filled completely with water.
- **F.** The water volume inside the tank is adjusted, leaving it exactly at the 700 l. mark.
- G. Reset the display [Aut] by pushing the RESET [7] switch.
- H. The pump is started again and all boom sections are opened until 300 l. of water have been pumped through the boom (read on the tank).
- I. If the number of litres read on the tank does not match the number of litres registered by the flow gauge, a new flow value has to be stored into the monitor.

A higher flow value induces a lower number of litres registered on the monitor.

A lower flow value induces a higher number of litres registered on the monitor.

Change and Control of a New Flow Value

- J. The display [/test] should still be active and display the liquid volume applied during the test run.
- **K.** By pushing SET [2] and the +switch, the flow value appears on the display. The flow value is changed up/down by operating the Function Selector.
- L. Push SET [3] again, and the display now shows the liquid volume applied during the test run this time *calculated from the new flow value*. Any remaining inconsistencies between the reading on the tank and the reading on the monitor are removed by altering the flow value until the two readings are equivalent.

D) Storage of Desired Dosage (litre/hectare)

The desired dosage can *only* be entered when:

- ⇒ The tractor is stopped
- ⇒ The boom section is closed for liquid supply
- ⇒ The auto dosage is active
- A. Activate the display [Ac
- B. Push SET [3] and the +switch. This action causes the last number on the display to flash.
- C. The wanted dosage (1./ha) is stored using the function selector
- **D.** Conclude by pushing SET [3]. The stored dosage is shown on the display.

When the monitor is set on AUTO, the applied liquid volume per hectare will always match the stored dosage - no matter variations in speed (driving dependent dosage).

When the tractor is stopped, the display will show the encoded/wanted dosage. However, when the tractor is driving, the monitor shifts to showing the actual liquid volume applied.

If the monitor does not display the wanted dosage during spraying (- even if the red lamps indicate that an altered dosage is recommended), it might be because the main tap needs to be loosened/tightened a little.

In AUTO, the wanted dosage can be altered during driving by pushing the +/÷ switch. Each push alters the dosage 10% in proportion to the stored dosage. The new value of wanted dosage remains on display for two seconds after the alteration. Then, the display shows the actual liquid volume applied once again.

FOR DANFOIL SERVICEMAN

E) Reading of the Stored Driving Time Factor

At AUTO dosage (driving depended dosage), the dosage is controlled automatically by the monitor, which signal the motor valve when the dosage needs altering.

In the monitor, different values are stored (driving time factors). These values determine how fast or slowly that the motor valve adjusts the dosage.

The Driving Time Factors are read as follows:

- A. Activate the display [ka/h]
- B. Switch to AUTO dosage
- C. Push RESET [1] and SET [2] at the same time, causing the display [7] to be displayed.
- **D.** On the display dots are flashing. The number on the display is the stored driving time factors. Normally 4522.
- E. Conclude by pushing SET [3] and display [hath is activated again.

If it takes too long for the AUTO dosage to adjust to the wanted dosage (after a turn or when opening/closing the boom sections), or if the dosage varies a great deal during spraying, please contact your dealer.

The driver is not allowed to alter the driving time factors before having consulted the dealer.

F) Error codes

ERROR CODES	CAUSATION	SOLUTION
E05	Too little dosage	Open the main tap a little.
E06	Too much dosage	Close the main tap a little.
E10	Wind velocity exceeds the value stored	Check the value programmed.
E54	Negative work width (which means the total of the boom sections exceeds the working width programmed).	