# RG 700 AGCONTROL QUICK START GUIDE

()



### INDEX

•	Main Run Screen	3
•	Boom Setup	5
•	Rate Control Setup	8
•	Task Controller	18
	Self-Test Speed – Stationary Test	18
	Undefined Quick Start Job	20
	<ul> <li>Undefined Quick Start Job w/ Section Control</li> </ul>	22
	Loaded Job w/ Section Control	28



## **Main Run Screen**



- Left icons allow command and monitoring of the most important functions of machine.
- Hard key buttons on left allow navigation of console to various functions.



# Main Run Screen

 Access Main AGCONTROL Run Screen by pressing AGCONTROL hardkey and home if needed



- Sprayer application main screen monitors critical details of application.
- From this screen, you can change and accurately control rate application.



### **Main Run Screen**



- Main Run Screen allows command and monitoring of most important functions of the sprayer.
- Hard key buttons on right will set up the application.



### **Rate Control Setup**



- Values in white boxes can be edited.
- To change a parameter, use scroll wheel to select item (such as feedback), pushing in on the wheel, value can be changed, roll the scroll until desired parameter is met.
- Push in on scroll wheel to save.



# **Boom Set-Up**



### **Boom Set-Up**



• Select Boom Setup to display boom characteristics and active sections.



#### **Boom Set-Up – Current Boom Settings**

• Select current boom settings icon to view or adjust boom settings.



- Current Boom Setting page shows characteristics of the current boom.
- Information will be set up from factory and will not need to be changed.
- Choose bottom button to edit current boom or select "new" icon to add a new boom configuration.



# **AGCO Rate Control Settings**



## **Rate Control Set-Up**

 Enter Set-up area from main AGCONTROL run screen , select wrench hardkey.

	•	
Sprayer Setup Screen Flowmeter Setup Feedback 148.0 pu/gal Smoothing 2.5 %		Home (Main Run Screen)
Cal Factor 100% Rate (hz): Min 15 Max 210 Actual 0 Valve Setup	i 💽	Software Information
Sensitivity 3000 Actual		Save User Settings
Rate Bump 2.0]gal/A Dispense Delsy Tank Volume 700]gal 1.00]sec	+3	Load User Settings
VHold at Min Min 15psi Max 90psi Pressure Sensor	M 💽	Factory Default Settings
Pressure Min Opsi Max 150 psi Voltage Min 1000 mv Max 5000 mv Atmosphere <b>971</b> mv		Toggle to more options

 Set-up screen allows operator to set and change sprayer parameters, check software information, load/save parameters, load factory default and move to another page of options.



# **Rate Control Set-Up - Save/Load**

			•	
	▲ 1000	Flowmeter Setup Feedback 148.0 pu/gal Smoothing 2.5 v		
	0.0	Rate (hz): Min 15 Max 210 Actual 0		
		Bin Setup Manual Mode +/- 5.0		Save User Settings
UC5	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Rate Bump 2.0 gal/A Delay Tank Volume 700 gal 1.00 sec Nozzle Pressure Range		Load User Settings
7		VHold at Min Min 15psi Max 90psi		
	MMM	Pressure Him Opsi Nax 150psi Voltage Him 1000 mV Nax 5000 mV Atmosphere 971 mV		
		E	Q Esc	

- Save User Defined Settings (for Power ON)
  - User must save settings to use any changes at next power on
  - Will not save multiple settings
- Load User Defined Settings (from Power ON)
  - Press this to load any former saved settings, these may be different than factory settings



- Will only load last saved

## **Rate Control Set-Up - Flowmeter**

Image: Second and Second an
Flowmeter Setup
Feedback 148.0 pu/gal Smoothing 2.5%
Cal Factor 100%
Rate (hz): Min 15 Max 210 Actual 0

- Flowmeter Set-Up
  - Set flowmeter feedback number
    - # on flowmeter tag reads pulses/10 gal, while controller needs pulses/gal. MUST DIVIDE CAL BY 10 to get correct feedback number
  - Cal Factor set to 100% at new; can adjust if product starts to vary from rates
    - Ex. Rate 5% high, change cal factor to 95%
  - Min and Max Hz range of control
  - Actual feedback Hz
  - Smoothing Adjust displayed rate accuracy



### Rate Control Set-Up – Valve Set-Up



- Valve Setup
  - Sensitivity is reaction speed of valve to ensure accurate application
    - Set high will oscillate
    - Set low will cause slow convergence
  - Actually displays percentage that PWM valve is open
    - Can be used for troubleshooting



# Rate Control Set-Up – Bin Set-Up



#### • Bin Set-Up

- Manual Mode ± sets control valve opening % when in manual mode
  - Actual from Valve Setup (previous page) must read appoximately 40% before application occurs
- Rate Bump controls the rate bump when in auto mode
- Dispense delay will be set to 1 sec. from factory and should not be changed



### Rate Control Set-Up – Nozzle Pressure

Nozzle Pressu	re Range	May 90 and
Mold at Min	Min 15 psi	Max 90 ps1
	Bin Setup Manual Mode +/- 5.0 % Rate Bump 2.0 gal/A Dispense Delay	
	Tank Volume 700 gal 1.00 sec Nozzle Pressure Range VHold at Min Hin 15 psi Hax 90 psi	
	Pressure Sensor Pressure Min Olesi Max 1500si	
	Voltage Hin 1000)av Hax 5000)av Atmosphere 971 av	
		() () Esc

- Nozzle Pressure Range
  - Min and Max are based off nozzles being used, this will set the top and bottom of green bar graph in nozzle pressure gauge on product run screen. These settings trigger turtle or rabbit alarm for below or above recommended pressure ranges.
  - Place check in the box if pressure should never drop below minimum
    - Keep in mind, if checked, this may mean overapplication if speed is too slow



#### **Rate Control Set-Up – Pressure Sensor**

	_
Pressure Sensor	
Pressure Min Opsi Max 150psi	
Voltage Min 1000 mV Max 5000 mV	
Atmosphere 971 mv	
UC5     IT     PS1     It     PS1     It     It	~
Pressure Sensor Pressure Min Opsi Max 150psi Voltage Hin 1000av Atmosphere 971av	

- Pressure Sensor These values should not need to be changed
  - Min, max sets nozzle pressure gauge operating range
  - Min, max mV sets operating range of the sensor for an accurate reading (Do not change)
  - Atmospheric pressure mV is a calibrated value to ensure sensor reads accurately; calibrate annually or when needed



# **Rate Control Set-Up - Calibration**



- To see calibration hard key, use "Next Page" hard key on the right.
- To calibrate pressure sensor, select Calibration hardkey.
  - A calibration status bar appears at the bottom of pressure sensor area
  - Calibration should be done at least annually
    - Pull plugs from boom strainers to ensure boom is empty and sensor sees atmospheric pressure
- At any time, to exit Set-Up, press the Home Key.



# **Self-Test Speed - Stationary Test**



# Self-Test Speed – Stationary Test



 From the Chassis screen , use scroll wheel to highlight a window, press in on scroll wheel, use scroll wheel to highlight speed source screen and accept, press the wrench icon to edit settings.



# **Self-Test Speed – Stationary Test**



- Use Speed Source hard key to open the window, use scroll wheel to change speed source to manual.
- Use Manual Speed hard key to open the window, use the scroll wheel to enter a manual speed.
  - Once accepted, the system can be tested while machine is static
  - Once finished, the speed source must be changed back to the original setting



# **Undefined Quick Start**

The second state of the se



## **Undefined Quick Start Job**



 From AGCONTROL main run screen , and home if needed , enter Tank Reload screen , change tank % or tank volume and press checkmark to reload.



# **Undefined Quick Start Job**



- From this screen, operator can change and accurately control rate application.
- Use scroll wheel to hightlight target rate (blue box), accept, and scroll to desired rate. Once accepted product application can begin.
  - NOTE: Automatic Section Control is unavailable through this process. (See Undefined Quick Start w/Section Control)







 From AGCONTROL run screen , and home if needed , enter tank Reload screen , change tank % or tank volume and press checkmark to reload.





- 1) Rate must be set. See Undefined Quick Start Job.
- 2) Then a partial task or job must be set up; select the Task Controller hard key to begin.



- 1) To start an undefined task with section control, select Start.
- 2) To auto-generate a new task name, select the "New Task" hard key.
  - New task name will be based on Date (YYYY\_MM\_DD) and Task Number (00x).
    - All areas on this page can be changed as required
    - Use scroll wheel to highlight name box, select to enter a new name
    - Use green check to accept any changes if finished



- Previously entered info (customer, farm, field) can be selected from the drop-down list. Use scroll wheel to highlight area, press end of wheel to see list
  - Use green check to accept any changes
- 2) To edit previously entered info or add new, use hard keys on right for each field (customer, farm, field)
  - For example, select the hard key for Customer Info

New Task	
2013_11_12_001 Customer: Select Customer Farm:	Customer
Select Farm Field: Select Field	Farm Info
	Field Info
Click Esc to Cancel	



- 1) To add a new customer, select add customer 🕋
  - Use scroll wheel to highlight area to change, select, input changes
    - Use green check to accept any changes
- 2) To edit an existing customer, select edit customer
  - Use scroll wheel to highlight area to change, select, input changes
    - Use green check to accept any changes
- 3) Changes to Farm and Field info follow the same format though different content.





- Once Task Name has been reviewed and accepted, select START button to begin task.
- 2) With stop sign visible, ottask is running.
- 3) Use scroll wheel to highlight a window (red box), select ESC button on the lower right corner of C1000.



1) Use scroll wheel to select "Control" container to set up Section Control





Once Control container has been selected, select Section Control 🚬 1) icon.





- 2) Use scroll wheel to highlight coverage type or look-ahead. Press wheel to accept
- 3) Coverage; choose from overlap mixed , or underlap for Section Control.
- Look-Ahead; Set in inches 4)
- To accept Section Control conditions, select checkmark hard key 5)





- Now the stop icon will display, application can begin with automatic Section Control
- NOTE: STOP sign appears in section control icon
  - Section control will remain on until turned off.



- To view as applied map,
  - 1) Use scroll wheel to highlight a window (red box)
  - 2) select ESC button on the lower right corner of C1000.
  - 3) Use scroll wheel to select "Map" container.





- Use map zoom hardkey to zoom in and out
- Use full screen hardkey to show the map in the full screen







and the state of the second state of the secon





 From AGCONTROL run screen , and home if needed, enter tank Reload screen , change tank % or tank volume and press checkmark to reload.





- 1) To start a map job from storage media (USB or SD Card), insert storage media into right side slot and wait for above screen to populate.
- 2) Once populated, select import job icon. 💯
  - Pop-up will display once job or jobs have been successfully imported.



1) Open Task Controller 🖾, select "Start" icon 🔤 to find map job.



- 2) In Select Task screen, use scroll wheel to highlight the top box, push in on wheel to see drop down list, scroll to needed map as shown above.
- 3) Once task has been found and accepted, select Start.





- Now the task is running; set up Section Control for operation.
- If this is not the first job of the day with section control, it may already be running
  - Section Control NOT setup 🛅
  - Section Control Setup, ready to spray
- If Section Control is ready, product application can start, otherwise continue to next page.



- Once Task Name has been reviewed and accepted, select START button to begin task.
- 2) With stop sign visible, ottask is running.
- 3) Use scroll wheel to highlight a window (red box), select ESC button on the lower right corner of C1000.



 Use scroll wheel to select "Control" container to set up Section Control





Once Control container has been selected, select Section Control 🚬 1) icon.





- 2) Use scroll wheel to highlight coverage type or look-ahead. Press wheel to accept
- 3) Coverage; choose from overlap -, mixed -, or underlap for Section Control.
- Look-Ahead; set in inches 4)
- To accept Section Control conditions, select checkmark hard key 5)





- Now the stop icon will display, application can begin with automatic Section Control
- NOTE: stop sign appears in section control icon
  - Section control will remain on until turned off.



- To view as applied map,
  - 1) Use scroll wheel to highlight a window (red box)
  - 2) select ESC button on the lower right corner of C1000.
  - 3) Use scroll wheel to select "Map" container.





- Use map zoom hardkey to zoom in and out
- Use full screen hardkey to show the map in the full screen









© 2014 AGCO Corporation. AGCO® and RoGator® are registered trademarks of AGCO Corporation. AGCO Corporation has a corporate policy of continuous product improvement and development; therefore, specifications are subject to change without any advance notice. AGCO Corporation is not responsible for differences between the specifications or illustrations contained in this publication and the actual equipment. Equipment produced by other manufacturers is shown in photographs in this brochure for the purpose of illustration only and is not intended as an endorsement of that particular equipment or its suitability. All rights reserved. COURSE CODE: TGSLSAED1200EN

and the second states of the second states and the second states and