

EVO™ Settings for the Pump/PSI NAV Commander Module

Machines in 2020 and After

Use the settings below to start programming the rate controller and the EVO on your machine.

NOTE: The rate controller settings shown on the Viper 4 are different for each rate controller type.

Software version information

Rate Controller Type	Rate Controller Software Version	EVO System Software Version
RCM	21.2.0.3	1.1.55
PC2 Node	Any After 2.3.0.31	1.1.53 or After

Viper 4 Settings for the PC2 Node

User Settings:	
PWM High Side Drive:	Enabled (Checked Box)
Product Settings:	
Valve Type:	PWM
Min Pump PWM:	Record Rate Controller Setting
Max Pump PWM:	Record Rate Controller Setting
Standby Pump PWM:	Disabled (Unchecked Box)
Response Sensitivity:	79 (Recommended Starting Point)
Deadband:	2%
Pressure Settings:	
Response Rate:	50 (Recommended Starting Point)
Minimum Pressure:	10 PSI
Maximum Pressure:	150 PSI
Boom Pressure Cal:	Calibrate Appropriately (Turn the Cab box off and calibrate with the pump shut off and the booms discharged completely)
Advanced Pressure Calibration:	
Pressure Sensor:	Boom
Pressure Sensor Range:	(0-250) PSI

Viper 4 Settings for the RCM

Control Valve Setup	
Control Valve Type:	PWM
Valve Response Rate (1-100):	75 (Recommended Starting Point)
Control Deadband:	1
PWM Setup	
PWM High Limit:	80
PWM Low limit:	30
Standby Pump PWM:	Disabled (Unchecked Box)
PWM High Side drive:	Enabled (Checked Box)
Pressure Setup	
Boom Pressure:	0-250
Minimum Pressure:	10
Maximum Pressure:	120
Minimum Pressure Alarm:	Disabled (Unchecked Box)
Maximum Pressure Alarm:	Disabled (Unchecked Box)

EVO Display Settings

Main Menu	
Backlight:	5
Alarm Volume:	3
Turn Compensation:	On
Rate Sync:	On
Pressure Increment:	5 psi
Advanced Menu	
System Gain:	5.0 (Recommended Starting Point)
P-Gain:	5
I-Gain:	0.25
Nozzle Hold Delay:	0 sec
Low Pressure Shutoff:	8 psi
PWM Frequency:	10 Hz
Valve Open Time:	15 ms with 7-watt valves 20 ms with 12-watt valves
Units:	US (psi)
Nozzle Valve Spacing:	Program per system configuration
Module Location Menu:	Program per system configuration
Section Size Menu:	Program per system configuration
GPS Menu:	
GPS Source:	CAN (with EVO GPS Transmitter Module) SERIAL (with 3 rd party GPS receiver)
Boom Type:	FIXED
GPS to Axle:	Enter the distance the GPS is from the rear axle
Trailer Hitch to Axle:	0
Trailer2 Hitch to Axle:	0
Pump/Servo Menu:	
Servo Type:	PWM
Servo Min:	Enter the Rate Controller Min PWM Pump Setting
Servo Max:	Enter the Rate Controller Max PWM Pump Setting
Nozzle Cycle Time:	0.1 sec
Servo Hold Delay:	0 sec
Input Current Load:	Off
Low Flow Menu:	Disabled
PSI Module Menu:	
Sensor Module:	CMD (with PSI NAV Commander Module) Trans (with Pressure Transmitter Module)
Sensor Offset:	0 psi
Sensor Volt Min:	1 volts
Sensor Volt Max:	5 volts
Sensor Pressure Min:	0 psi
Sensor Pressure Max:	250 psi
Pressure Command:	On
Navigation IMU:	Off