

GasMaster

By *PRODUCTION SYSTEMS*

[307] 682-1454

**P.O. Box 1256 / 9911 HWY 14/16
Gillette, WY 82717**

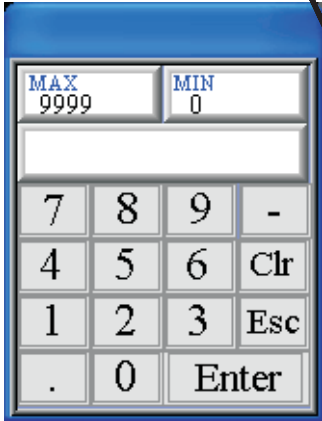
Fax: (307) 685-3230

**Web: www.productionsystems.biz
Email: keraig@productionsystems.biz**

Press to bring up Keypad and enter password. (Certain parameters are not adjustable without access.)

Displays any current alarms

Displays user level
0- limited control
1- full control



d09/24/09 14:40:15 High/Low Screw Oil09/24/09 14:40:15

LOG IN LOG OUT

ACCESS LEVEL
0

EVENTS



[307] 682-1454

Press to return user access to zero.

Values Guages Outputs Setpoint

Press for events.



For more info on Values, go to page 2.

For more info on Guages, go to page 3.

For more info on Outputs, go to page 4.

For more info on Setpoints, go to page 5.

Returns to Main screen

Allows you to enter a value for the amount of teeth on the flywheel.

Puts the unit in auto Start. If the unit goes down it will restart automatically. Unless you hit the stop button then you need to hit start to

For more info on Gauges, go to page 3.

For more info on Process, go to page 4.

For more info on Trending, go to page 5.

For more info on Setpoints, go to page 6.

The screenshot shows a control interface with several sections:

- Navigation Buttons:** HOME, GAUGES, PROCESS, TRENDING, SETPOINTS.
- Gauges:** SUCTION (0.00), COMP OIL (0.00), PRESSURE (0.00), ENGIN OIL (0.00), TEMP (0.00), WATER (0.00), RPMS (0.00).
- Outputs:** Crank Time (0), Crank Reset (0), OverSpeed (0).
- Setpoint Controls:** AUTO, MANUAL, START, STOP, RESET.
- Labels at the bottom:** Values, Guages, Outputs, Setpoint.

Puts the unit in manual Start. You have to hit the start button to start the unit.

Allows you to start the unit manually.

Allows you to stop the unit in manual or auto.

Allows you to clear any faults and restart the unit.

Enter a time limit for max cranking of the unit.

Enter a time limit after cranking that you have to wait to be able to start cranking again.

Enter a value for max rpms.

Enter a time limit for a reset delay on your kills so Auto doesn't Start and Stop the unit as the gauges fluctuate .

Live Values

SUCTION	COMP OIL
0.00	0.00
PRESSURE	ENGIN OIL
0.00	0.00
TEMP	Crank Time
0.00	0
WATER	Crank Reset
0.00	0
RPMS	OverSpeed
0.00	0

Press for Water Jacket Temp Gauge.

Press for Engine Oil gauge.

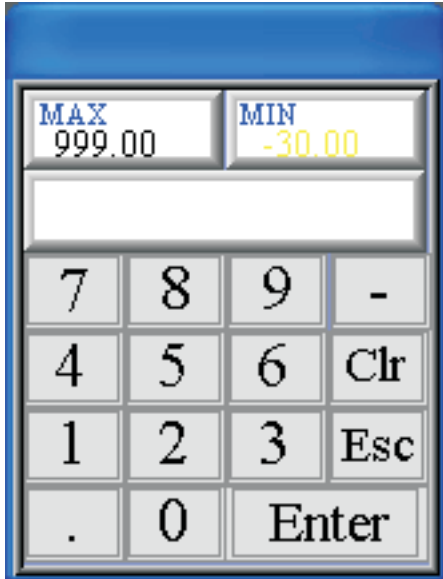
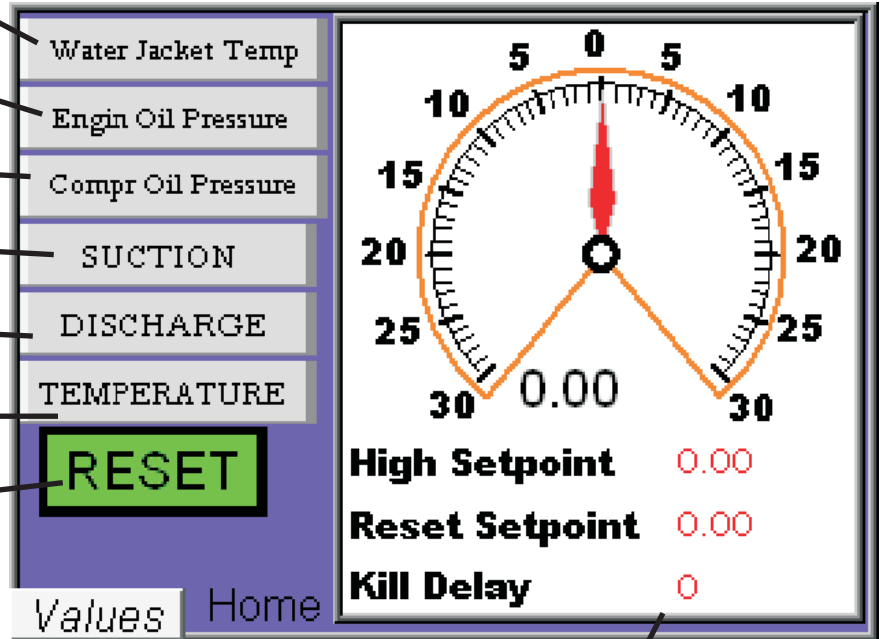
Press for Compressor Oil Gauge .

Press for suction gauge.

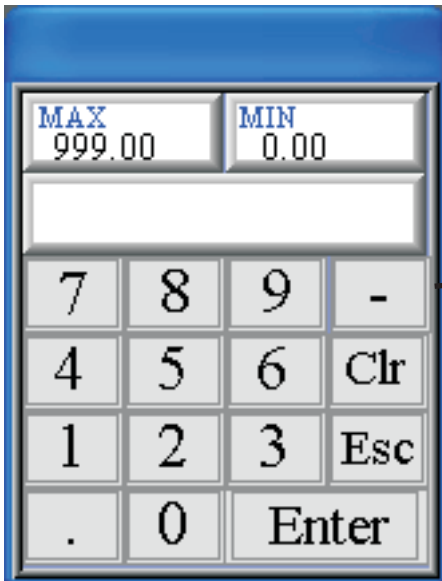
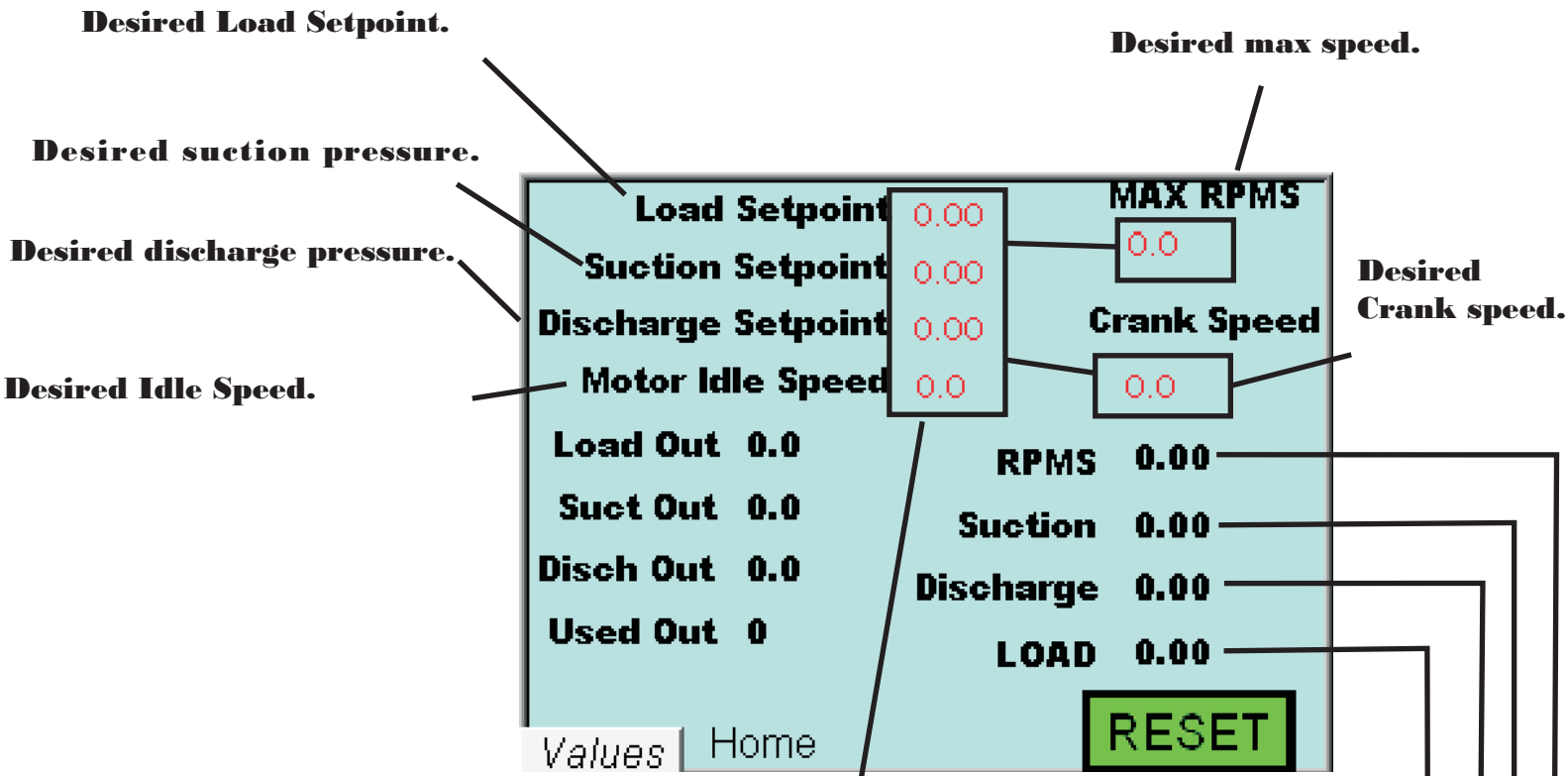
Press for discharge gauge.

Press for temperature gauge.

Press to reset any and all previous faults.



Click on desired point and Keypad will come up to enter desired set points



Click on desired point and Keypad will come up to enter desired set points

Load Reading.
Discharge Pressure.
Suction Pressure.
Motor RPMS.

Speed that drive is trying to accomplish.

HOME	SUCTION	COMP OIL	Tooth Count
	0.00	0.00	0
GAUGES	PRESSURE	ENGIN OIL	
	0.00	0.00	AUTO
PROCESS	TEMP	Crank Time	MANUAL
	0.00	0	
TRENDING	WATER	Crank Reset	START
	0.00	0	STOP
SETPOINTS	RPMS	OverSpeed	RESET
Reset Delay	0.00	0	
0			
Values	Guages	Outputs	Setpoint

Press for trending information on key values.

Press to activate or deactivate individual process controls.

Full scale for transmitters.

The screenshot shows a control panel with the following elements:

- Top row: Disch Press Scale , Water Temp Scale , Engine Oil Scale
- Second row: Temp Scale , Compr Oil Scale , Load Scale
- Three indicator lights labeled Suction, Load, and Pressure, each with a red and green section.
- Parameter table below the lights:

Gain	0.00	0.00	0.00
Deadband	0.00	0.00	0.00
Reset	0.00	0.00	0.00
Rate	0.00	0.00	0.00

At the bottom, there are two buttons: "Values" and "Home".

Go to page 7 for further information on all 4 points.

The keypad interface shows:

- MAX: 999.00
- MIN: 0.00
- A numeric keypad with buttons for 7, 8, 9, -, 4, 5, 6, Clr, 1, 2, 3, Esc, ., 0, and Enter.

Click on desired point and Keypad will come up to enter desired set points

Gain

The proportional (P) of the PID algorithm is the gain. A positive value of gain configures a forward-acting PID controller and a negative value of gain configures a reverse acting controller.

Reset Time

The integral (I) part of the PID algorithm is the reset time. This value, in seconds, controls the reset gain (or magnitude of integral action) in a PI or PID controller. This typically referred to as Seconds Per Repeat. From the equation above it is seen that the integral action of the PI or PID controller is a function of the reset time and the execution period (cycle time). A smaller reset time provides more integral action and a larger reset time provides less integral action. Valid range is any value greater than 0. A value of 0 disables the reset action.

Rate Gain

The derivative (D) part of the PID algorithm is the rate time. This value, in seconds, controls the rate gain (or magnitude of derivative action) in a PD or PID controller. From the equation above it is seen that the derivative action of the PD or PID controller is a function of the rate gain and the execution period (cycle time). A larger rate gain provides more derivative action and a smaller rate gain provides less derivative action. Valid range is any value greater than 0. A value of 0 disables the rate action.

Deadband

The deadband parameter is used by the PID algorithm to determine if the process requires the control outputs to be changed. If the absolute value of the error is less than the deadband, then the function blocks skips execution of the control algorithm. This prevents changes to the output when the process value is near the setpoint and can reduce wear on the control elements. Valid range is any greater value than 0. The setpoint is a floating-point value representing the desired value of the process value.