Valley Pro2 Control Panel

Quick Reference Guide

QUICK REFERENCE GUIDE

To Run The Machine: (Refer to the Overview and Operation sections of the Owner's Manual, and to the Advanced Features Manual)

1. ALWAYS make sure that vehicles, other equipment, livestock, and people are clear of the machine before operating.
2. Turn the control panel main disconnect switch to the ON position. If the power is supplied by an engine driven generator, adjust the RPM of the generator until the voltmeter reads 460 – 505 volts. DO NOT EXCEED 505 VOLTS.

Run The Machine Wet (With Water)

3. Press [WATER ON].
4. Select direction of travel by pressing [FORWARD] or [REVERSE].
5. Set the water application by pressing [DEPTH] or [PERCENT].
   - Use [DEPTH] to set water application by inches(mm) of water.
   - Use [PERCENT] to set water application by percent timer setting.
6. Use the numeric keys to enter the depth of water in inches (mm) or the percent timer setting.

[1] [2] [3]
[4] [5] [6]
[7] [8] [9]
[0]

7. Press [ENTER] to retain value.
8. Press [START] to start the machine.
9. Press [STOP] to stop the machine.

Controlling Auxiliary Relays:

1. Press [OPTIONS].
2. Press [1] for AUX1 or [2] for AUX2.
3. Press [1] for ON or [0] for OFF.

Selecting Stop-In-Slot On/Off:

1. Press [SIS ON] to enable the stop-in-slot.
2. Press [SIS OFF] to bypass the stop-in-slot location.

To Set The Stop-In-Slot Position:

1. Press [SYSTEM].
2. Press [1] for CONSTANTS.
3. Press [3] for Stop-In-Slot.
4. Enter the desired stop-in-slot position in degrees and press [ENTER].

Turning Power And Pressure Restart On:

1. Press [OPTIONS].
2. Press [7] for AUTORESTART.
3. Press [1] for ON or [0] for OFF.
4. Press [2] for PRESSURE, [1] for POWER, or [0] for BOTH.

NOTE: This option requires a Start$ be entered. Refer to the section in the Advanced Features Manual entitled "Auto Restart" for more information.

Selecting Auto Reverse Or Auto Stop:

1. Press [OPTIONS].
2. Press [6] for AUTOREVERSE.
3. Press [1] for AUTO REVERSE or [0] for AUTO STOP.

NOTE: Only applicable with drive unit mounted end-of-field stop/auto reverse hardware. ARAS must be ON.

To turn ARAS ON press [SYSTEM], [1], [8], [8], [2], [1].

Run The Machine Dry (Without Water)

3. Press [WATER OFF].
4. Select direction of travel by pressing [FORWARD] or [REVERSE].
5. Set the speed of travel by pressing [PERCENT].
6. Use the numeric keys to enter percent timer setting.

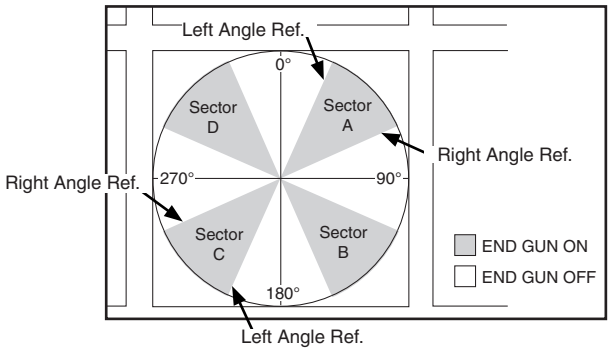
[1] [2] [3]
[4] [5] [6]
[7] [8] [9]
[0]

7. Press [ENTER] to retain value.
8. Press [START] to start the machine.
9. Press [STOP] to stop the machine.

Setting The End Gun:

Refer to Figure 1.

1. Press [SYSTEM].
2. Press [1] for CONSTANTS.
3. Press [4] for End Gun.
4. Select the sequence (#1-9) that you wish to work with.
5. Enter the left angle (end gun ON) in degrees and press [ENTER].
6. Enter the right angle (end gun OFF) in degrees and press [ENTER].
7. Select another sequence or press [ESC] to exit.



SECTOR A		SECTOR B		SECTOR C		SECTOR D	
LEFT ANGLE	RIGHT ANGLE	LEFT ANGLE	RIGHT ANGLE	LEFT ANGLE	RIGHT ANGLE	LEFT ANGLE	RIGHT ANGLE
31	59	121	149	211	239	301	329

Figure 1

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System Faults & Descriptions

FAULT	DESCRIPTION
SYSTEM POWER FAULT	Voltage has fallen below the low voltage limit for more than 15 seconds, or power was lost while the machine was running.
SYSTEM SAFETY FAULT	Caused by a break in the safety return circuit that lasted longer than three seconds.
LOW PRESSURE FAULT	The pressure fell below the low pressure limit, or the Pressure Delay is not a sufficient amount of time to build pressure in the machine after it is started.
HIGH PRESSURE FAULT	With VRI-Zone on, the pressure went above the high pressure limit for more than three seconds.
WATER TIMER FAULT	The machine shut down because it was moving too slowly, thereby applying too much water.
COMMAND FAULT	The machine was commanded to stop by one of the following: 1) The STOP key was pressed. 2) An autostop condition occurred at the end-of-field stop. 3) A programmed STOP command was executed.
STOP-IN-SLOT (SIS) FAULT	The machine was shut down by the Stop-In-Slot.
PROGRAM FAULT	The machine was shut down because a Step program stopped the system.
AUTOSTOP FAULT	An autostop condition occurred at the end-of-field stop.
BBRAM FAULT	An attempt was made to start the machine when error E01 was displayed on the status screen.
FLOW FAULT	With VRI-Z on, the flow rate has fallen below the amount set in the FLOWMETER GAL/PULSE field.
FOR/REV FAULT	Both the forward and reverse sensor relays were on for more than 15 seconds while the system was running or waiting.
TIRE PRESSURE	Tire pressure shutdown was turned on and one or more tires had low pressure.
WIND FAULT	The machine shut down because the wind speed reached the high wind limit. The wind speed indicator is an option. WIND is only displayed on the system faults screen when wind is turned ON.
TEMPERATURE FAULT	The machine shut down because the temperature fell below the low temperature limit.
RAIN FAULT	The machine shut down because the rain limit was exceeded in the rain window time period.
DAILY OPS FAULT	The daily operations program shut the machine down because it is not allowed to run between a certain time period, DAILY OPS is only displayed on the system faults screen when Daily Ops is turned ON.
NO ACK	No Acknowledge is enabled and the BaseStation did not acknowledge the message.
RELAY COM FAULT	There is a hardware or software communication problem between the Pro2 module and the electrical relay board within the control panel.
GPS COM FAULT	When GPS is selected as a protocol and the system shuts down due to no communication with GPS for a user-specified amount of time, when shut down of GPS signal loss is ON, or while the system was running or waiting.
GPS LOCK FAULT	When GPS is selected as a protocol and the System shuts down due to GPS signal loss for a user-specified amount of time, or when shut down of GPS signal loss is ON, or while the system is running or waiting.
BOUNDARY FAULT	The machine shut down because it traveled beyond the forward or reverse Position angles.

Error Codes & Descriptions

ERROR	DESCRIPTION		ERROR	DESCRIPTION
E01	BBRAM - Checksum failed at power up.		E15	UNDERWATER ERROR - Check for induced voltages and % timer connections.
E02	EEPROM - Checksum failed at power up.		E16	VRI iS error communicating to primary com board.
E03	UNIT RESETS - This is logged when the software resets.		E17	VRI iS error communicating to sprinkler.
E04	POWER DROP - Power dropped below low voltage limit.		E18	GPS communications error, check GPS connection and power.
E05	SYSTEM SAFETY - Possible tower misalignment, drive unit may be stuck.		E19	GPS SIGNAL LOSS, check for clear path above antenna.
E06	PUMP SAFETY - Pressure too low after pressure delay.		E20	DGPS SIGNAL LOSS, check for clear path above antenna.
E07	PRESSURE SENSOR - Out of range high, check connection.		E21	LOW FLOW
E08	PRESSURE SENSOR - Out of range low, check connection.		E22	HIGH PRESSURE
E09	PRESSURE SENSOR - Pressure high with pump off, check connection.		E23	PLC COMMUNICATIONS ERROR. (GPS V2 Only)
E10	PRESSURE SENSOR - Mechanical switch could be stuck.		E24	RESYNC valve duty cycle due to pressure.
E11	RESOLVER - Angle jumping around. Lube J pipe.		E25	GPS COORDINATES OUT OF RANGE, check distance to GPS or for crosstalk.
E12	E12 RESOLVER - Out of range high, check for loose or shorted wires.		E26	LOW TIRE PRESSURE
E13	KEYPAD - Possible key stuck, check keypad connection.		E27	TPMS COMMUNICATIONS ERROR
E14	FWD/REV SENSE - Possible short, check wiring.		E28	VRI iS error report code - check menu: VRI diag / err report.

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