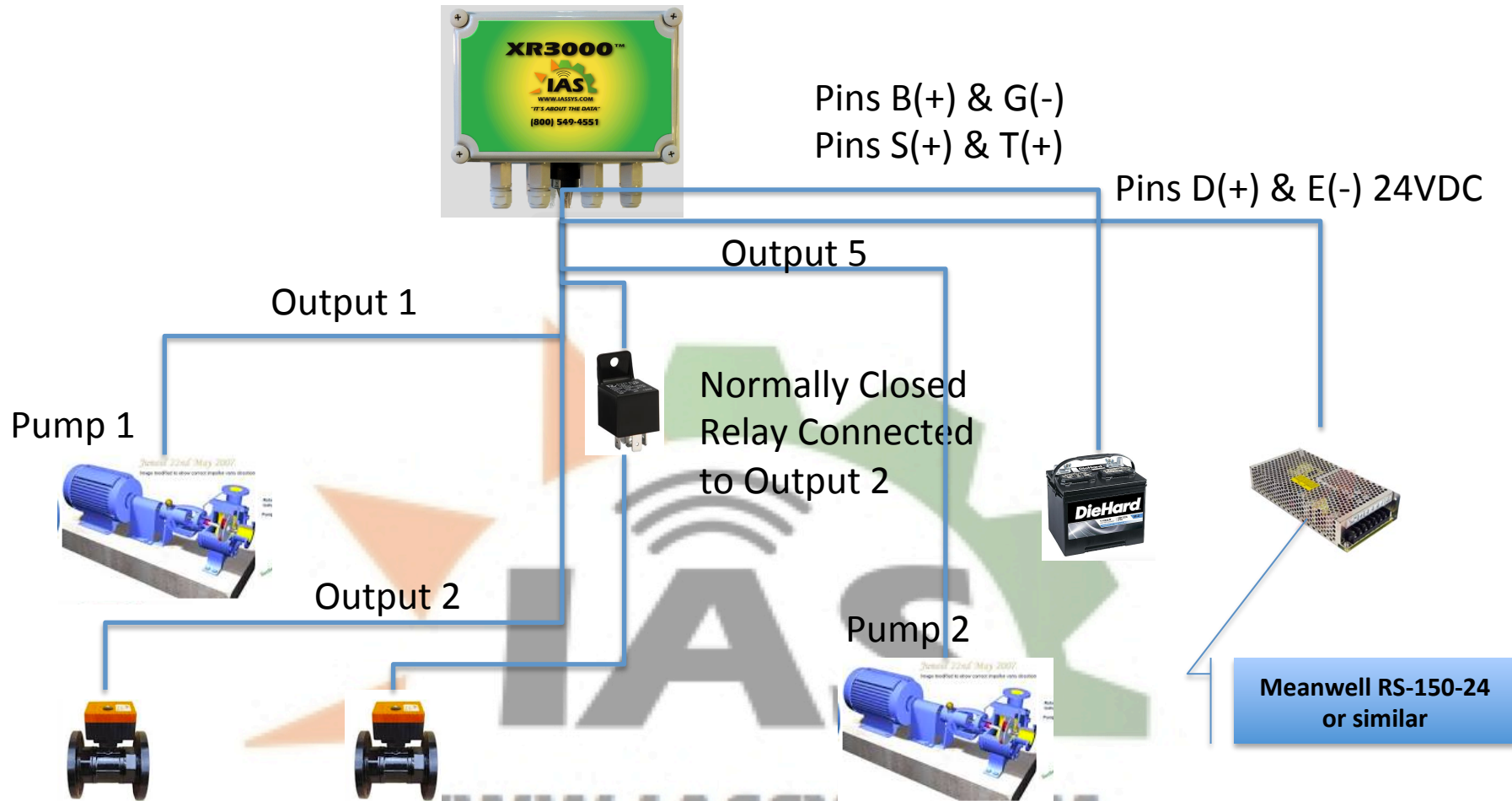


Configuring XR3000 to Start 2 Electric Pumps





Duty Cycle 15M On/Off - Alternating

In this example, the XR3000 is setup to start 2 individual electric pumps. Pump 1 is setup to run parallel valves which alternate on/off in an interlocked fashion. Pump 2 is just run on/off to the field. The 12V Deep Cycle battery is charged by the XR3000 and used to switch the relay Outputs.

Example of 2 Electric Pumps on 1 XR3000

Temperature and Soil Moisture Start

Control	Input	Output	Wireless	System	Local Sensors
Channel Inputs 1-4					
1:Input	2:Input	3:Input	4:Input		
54 : 86	55 : 86	56 : 86	57 : 86		
Sensor Reading 1-4					
1:RF Soil Moisture	2:RF Soil Moisture	3:RF Temp	4:RF Temp		
10 %	10 %	59.6 F	60.2 F		
On Threshold (Low or High) 1-4					
1:RF On Percent	2:RF On Percent	3:RF Temp On	4:RF Temp On		
10 %	10 %	32.0 F	32.0 F		
Off Threshold (High or Low) 1-4					
1:RF Off Percent	2:RF Off Percent	3:RF Temp Off	4:RF Temp Off		
50 %	50 %	35.0 F	35.0 F		
Output Selected for Channel 1-4					
1:CH Out	2:CH Out	3:CH Out	4:CH Out		
1	1	1	1		
Channel Inputs 5-8					
5:Input	6:Input	7:Input	8:Input		
58 : 86	53 : 86	52 : 86	51 : 86		
Sensor Reading 5-8					
5:RF Soil Moisture	6:RF Soil Moisture	7:RF Temp	8:RF Temp		
10.1 %	13.0 %	58.7 F	59.0 F		
On Threshold (Low or High) 5-8					
5:RF Percent On	6:RF Percent On	7:RF Temp On	8:RF Temp On		
10 %	10 %	32.0 F	32.0 F		
Off Threshold (High or Low) 5-8					
5:RF Percent Off	6:RF Percent Off	7:RF Temp Off	8:RF Temp Off		
50 %	50 %	35.0 F	35.0 F		
Output Selected for Channel 5-8					
5:CH Out	6:CH Out	7:CH Out	8:CH Out		
5	5	5	5		

Pump 1 Starts via
Output 1

Pump 2 Starts via
Output 5

☐ Write to Group(s) ☐ Refresh Every Minutes ☐ Retry on Error?

Select Device to View: XR3000 - Copy

Control Input Output Wireless System Local Sensors

Channel Trigger 1-4			
1:CH Trig	2: CH Trig	3:CH Trig	4:CH Trig
--	1	--	--
Output Start Delay 1-4			
1:Delay	2:Delay	3:Delay	4:Delay
--	--	--	--
MM.M	MM.M	MM.M	MM.M
If Non-Zero Use On Time X			
On Time 1	On Time 2	On Time 3	On Time 4
--	--	--	--
MM.M	MM.M	MM.M	MM.M
Exclusive Output 1-4			
Excl 1	Excl 2	Excl 3	Excl 4
<input type="checkbox"/> --	<input type="checkbox"/> --	<input type="checkbox"/> --	<input type="checkbox"/> --
Duty Cycle Duration 1-4			
Duty Cycle 1	Duty Cycle 2	Duty Cycle 3	Duty Cycle 4
--	15.0	--	--
MM.M	MM.M	MM.M	MM.M
Outputs for Buzzer and Schedule			
Buzzer Trigger	Sched 1 Out	Sched 2 Out	Sched 3 Out
--	1	--	5

Channel Trigger 5-8			
5:CH Trig	6:CH Trig	7:CH Trig	8:CH Trig
--	--	--	--
Output Start Delay 5-8			
5:Delay	6:Delay	7:Delay	8:Delay
--	--	--	--
MM.M	MM.M	MM.M	MM.M
Instead of Off Threshold			
On Time 5	On Time 6	On Time 7	On Time 8
0.0	0.0	0.0	0.0
MM.M	MM.M	MM.M	MM.M
Exclusive Output 5-8			
Excl 5	Excl 6	Excl 7	Excl 8
<input type="checkbox"/> --	<input type="checkbox"/> --	<input type="checkbox"/> --	<input type="checkbox"/> --
Duty Cycle 5-8			
Duty Cycle 5	Duty Cycle 6	Duty Cycle 7	Duty Cycle 8
--	--	--	--
MM.M	MM.M	MM.M	MM.M

Schedule 3 turns on Output 5/Pump 2

Output 2 is triggered by Output 1

Schedule 1 turns on Output 1/Pump 1

Duty Cycle for Output 2, 15M On, 15M Off.

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Wiring Guide

Deutsch HDP26-24-21SE

Pin Letter	Color	Description
B	Red	External 12V Battery (+) If Present (Charged by XR3000)
D	Red	24VDC Supply (+)
E	Black	24VDC Supply (-)
G	Black	External 12V Battery (-) If Present (Charged by XR3000)
H	Green	Relay 1 NO Output
J	Blue	Relay 2 NO Output
K	Purple	Relay 3 NO Output
L	Gray	Relay 4 NO Output
M	White	Relay 5 NO Output
N	Beige	Relay 6 NO Output
P	Pink	Relay 7 NO Output
R	Yellow	Relay 8 NO Output
S	Red/Green	Relay 1 Supply – will be switched to Output 1
T	Red/White	Relay 2-8 Supply – will be switched to Outputs 2-8

Example Wiring Instructions – for 24VAC Driven Irrigation System

- Connect Pins B,D, 19-24VDC at least 3 Amps.
 - Pin D supplies the controller and keeps the internal batteries charged.
 - Pin B would normally be connected to an external battery, but also powers the primary side of the internal Relays.
- Connect Pins E,G, S and T to Supply Ground
 - S and T will be used as supply on the Secondary of the internal relays to switch AC relays for each Motor Starter or Valve.
 - Assuming that a DC controlled AC relay is being used for each AC circuit, chain DC power to each AC relay, and wire each output (Pins H thru R) to the GND on the primary side of each AC relay. Wire the AC path thru the AC relay using the NO contacts. Then when any of the internal relay closes, the Secondary will ground the AC relay and allow the 24VAC to flow to the Motor Starter or Valve.