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W100/W600/W900/WebMaster One/WIND Controller Relay Interlocks

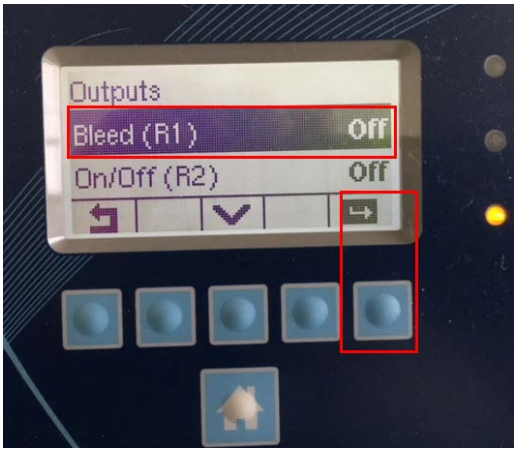
There are several different types of interlocks that can be programmed into the controller. This document discusses using the Interlock Channel field in the Relay menu, specifically, enabling one relay to interlock another relay.

W100 Controller

To navigate to the Relay Interlock menu, please follow the screen shots below.

Go to Outputs.

Select the Relay, press the Enter button.



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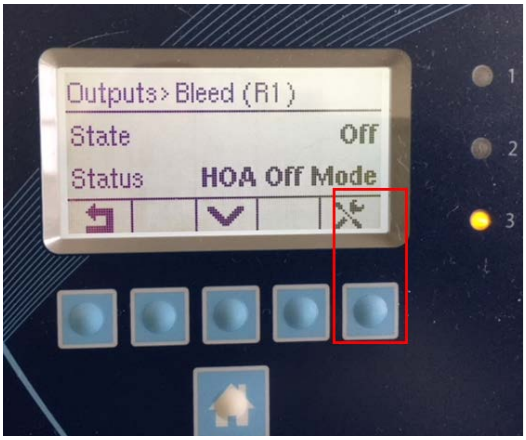
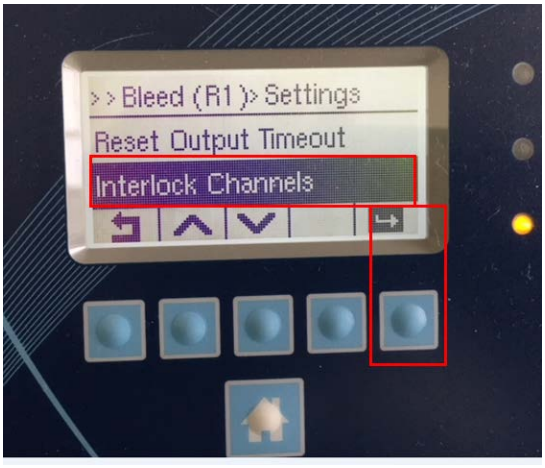
W100 Controller (continued)

Press the Setting button.



Scroll down and select Interlock Channels, and press the Enter button.



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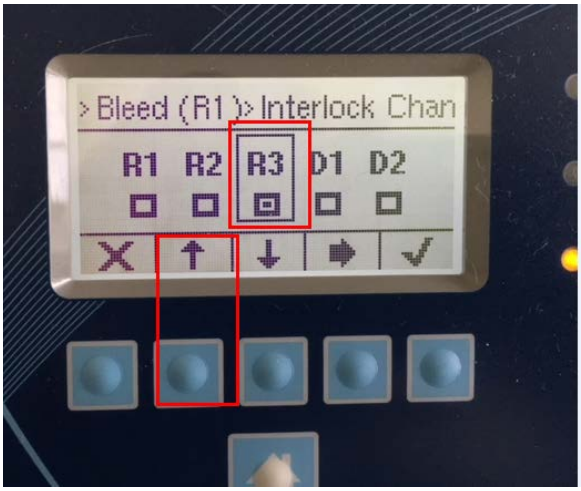
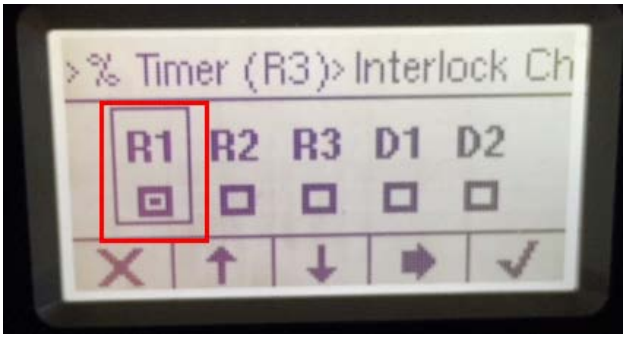
W100 Controller (continued)

You are in the Relay1 menu. Move the cursor to the Relay that is to interlock Relay1, and Press the Up Arrow button to select that Relay. In this case Relay3.



In the above example, you've programmed the R1 relay such that if R3 activates, R1 will be interlocked. If R1 is On when R3 activates, R1 will immediately shut Off. If R1 is Off when R3 activates, R1 will not be able to activate until R3 deactivates. This is referred to as Permissive Interlock.

Now keeping the above programming in R1 menu, let's say you go to Relay3 menu, **Outputs/R3/Settings/Interlock Channels** and press on R1, as shown in the screen shot below.



Since the R1 menu has Interlock Channels R3, and the R3 menu has Interlock Channels R1, whichever relay activates first will prevent the other relay from activating. This is referred to as Mutual Interlock.

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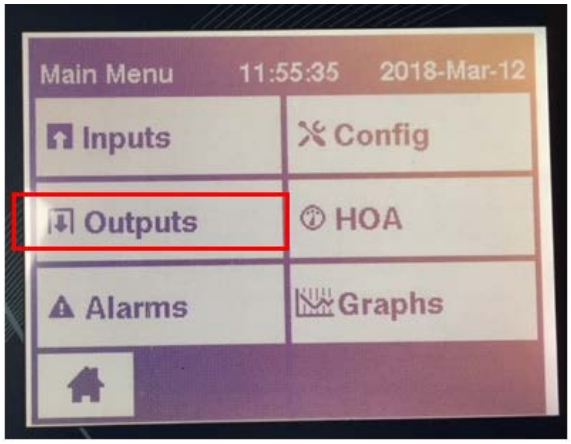
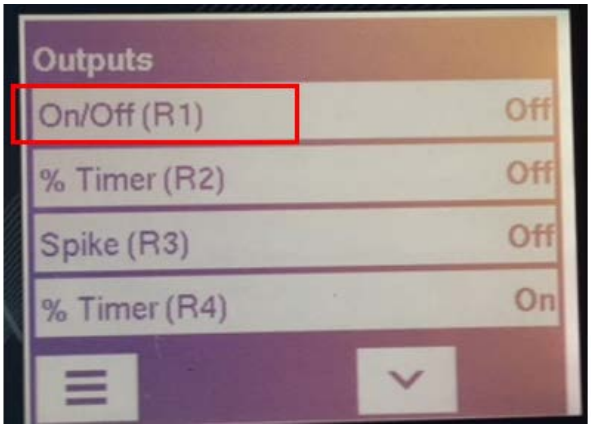
W600/W900 Controllers

To navigate to the Relay Interlock menu, please follow the screen shots below.

Go to Outputs.



Select the Relay.



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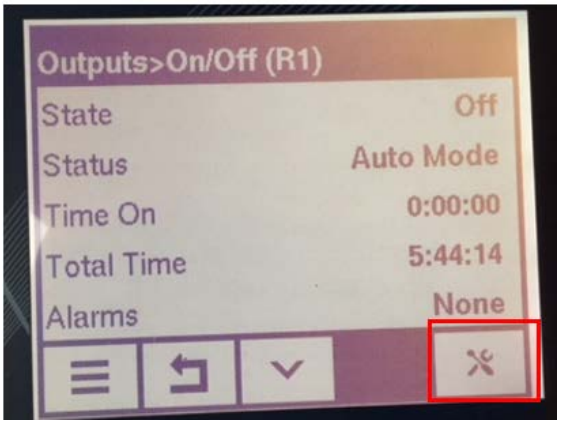
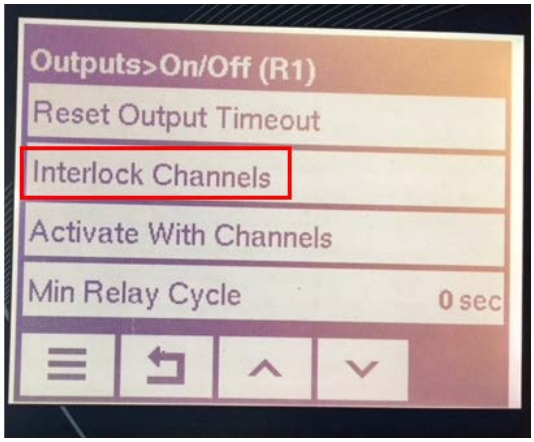
Go to Settings.

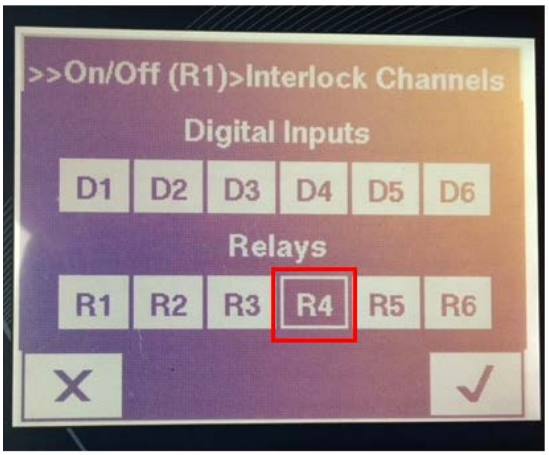


W600/W900 Controllers (continued)

Go to Interlock Channels.

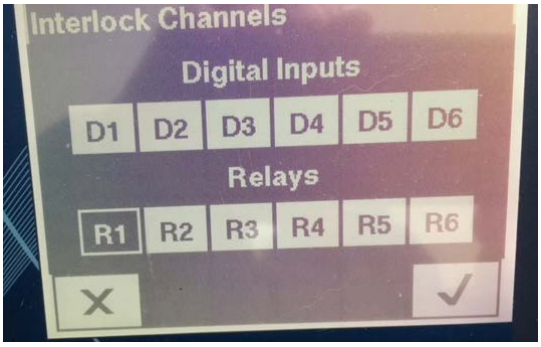


Press on the Interlock Channels field (shown above), and press on R4 (shown below), and you will see this screen:



In this example, you've programmed the R1 relay such that if R4 activates, R1 will be interlocked. If R1 is On when R4 activates, R1 will immediately shut Off. If R1 is Off when R4 activates, R1 will not be able to activate until R4 deactivates. This is referred to as Permissive Interlock.

Now keeping the above programming in R1 menu, let's say you go to Relay4 menu, **Outputs/R4/Settings/Interlock Channels** and press on R1, as shown in the screen shot below.



Since the R1 menu has Interlock Channels R4, and the R4 menu has Interlock Channels R1, whichever relay activates first will prevent the other relay from activating. This is referred to as Mutual Interlock.

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WebMaster One Controllers

Connect to the controller with a computer, go into Outputs/Bleed(R1) menu.

In the Bleed(R1) menu, if you check off Mutual Interlocks Feed(R2), then automatically in the Feed(R2) menu, in the Mutual Interlocks Bleed(R1) gets checked off also.

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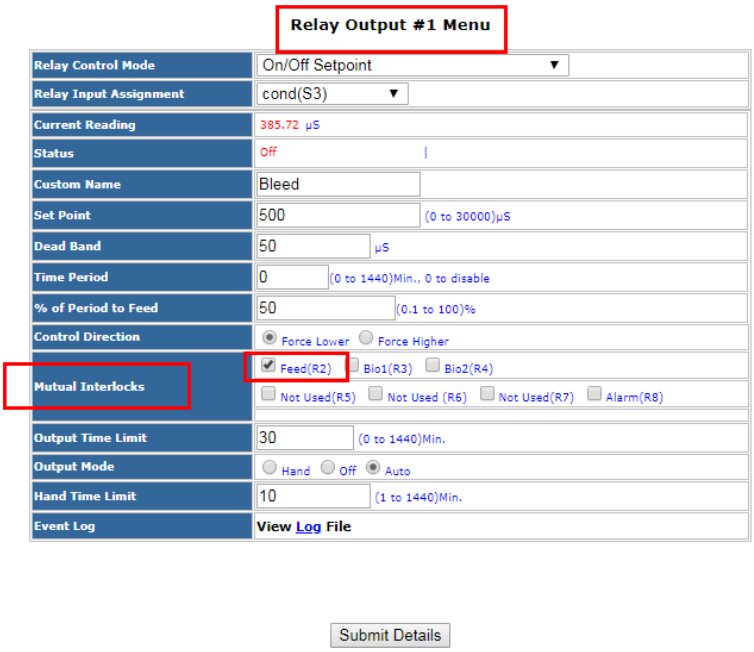
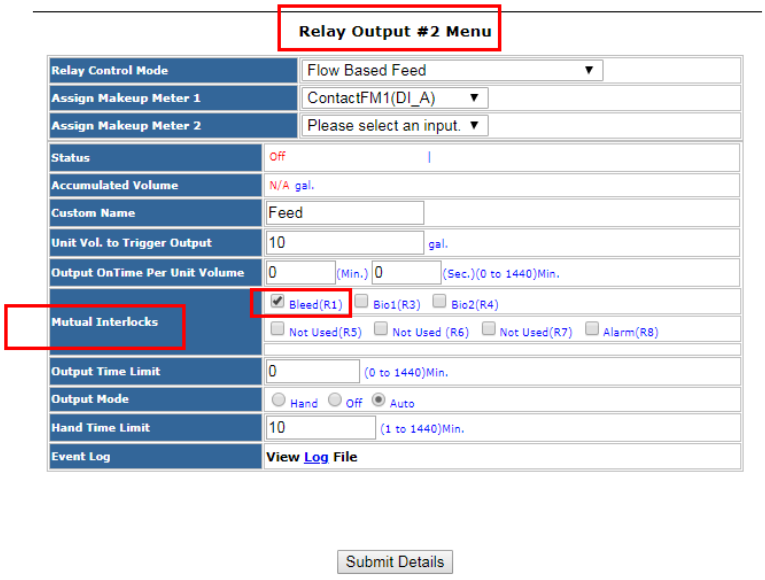
WebMaster One Controllers (continued)



In the Feed(R2) menu, in the Mutual Interlocks, Bleed(R1) automatically gets checked off also.



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WebMaster One Controllers (continued)

Since the Bleed(R1) menu has Mutual Interlocks Feed(R2), and the Feed(R2) menu has Mutual Interlocks Bleed(R1), whichever relay activates first will prevent the other relay from activating. This is referred to as Mutual Interlock. This is the only type of relay to relay interlock the WebMaster One controller can do.

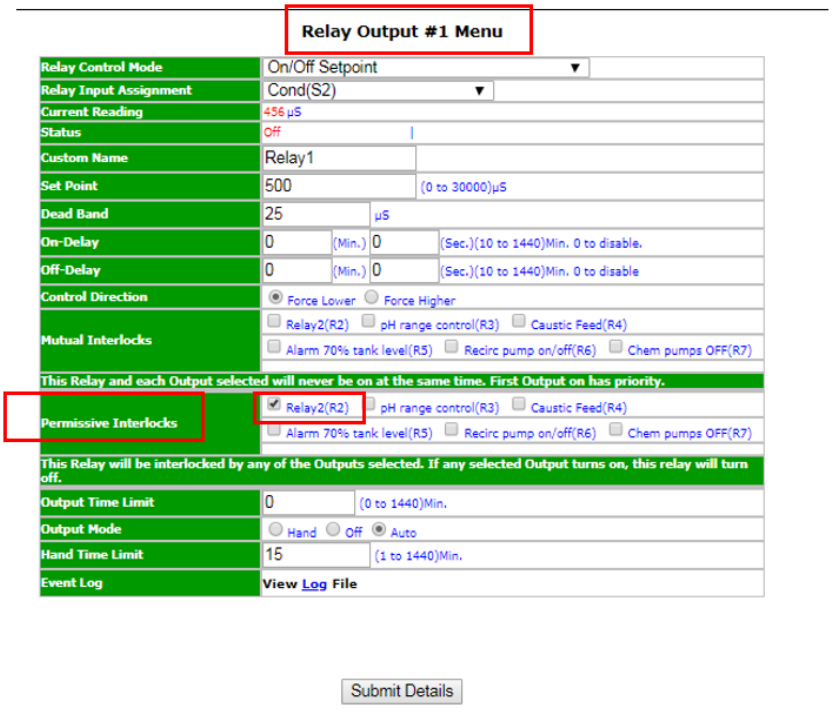
WIND Controller

The WIND controller has the same Mutual Interlock feature as the WebMaster One controller. In addition, the WIND controller has the Permissive Interlocks feature. This Permissive Interlocks feature will now be explained below.

Connect to the controller with a computer, go into Outputs Relay1(R1) menu.

WIND Controller (continued)

In the Relay1(R1) menu, check off Permissive Interlocks Relay2(R2).



In this example, you've programmed the Relay1(R1) such that if Relay2(R2) activates, Relay1(R1) will be interlocked. If Relay1(R1) is On when Relay2(R2) activates, Relay1(R1) will immediately shut Off. If Relay1(R1) is Off when Relay2(R2) activates, Relay1(R1) will not be able to activate until Relay2(R2) deactivates. This is referred to as Permissive Interlock.