

Technical Bulletin

Bulletin No. 008 Rev B
Subject: Usage of Sentar & Hawk with “Switch Hitter” & “Doubler” Products

Page 1 of 2
Product Applicability: RME Sentar, RME Hawk
Engineering Release: R. A. Olson
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A new version of firmware for Hawk and Sentar controllers has been developed to specifically deal with the station expander product known as the “Switch Hitter”. This device has a capacitive input filter, which draws high current for a short time after turning on the station to which it is attached. This phenomenon can cause a Wiring Fault indication in the display on a Sentar or Hawk controller whenever this device is used to turn on a valve.

A similar product known as a “Doubler” has a similar characteristic, but also creates another problem. When it switches, it produces high amounts of voltage transients. This product is NOT recommended for use with electronic controllers, and in fact, will not work at all with some competitor’s products.

When using some older high current solenoids or “doubling up” solenoids on a single station, a higher than normal inrush may also cause a Wiring Fault on Sentar or Hawk controllers.

Sentar Version 16 and Hawk Version 104 Firmware has a delay built in which ignores a high current for a short period of time after turning on any station. This upgrade has been tested with the Switch Hitter and will prevent the Wiring Fault problem associated with this product. It also may prevent nuisance Wiring Faults when using older solenoids or doubled solenoids. The Doubler is NOT recommended for use with these controllers due to the voltage transient generated. It is NOT a cure for conditions of station current greater than 1 Amp combined.

The following troubleshooting guide defines which action must be followed when experiencing electrical fault conditions.

TROUBLESHOOTING GUIDE

CONDITION	SOLUTION
A. Station current more than 1 Amp	Reduce current (change solenoid, check wiring)
B. Doubler installed	Remove Doubler
C. Switch Hitter installed	If Sentar Version is 15 or less, then upgrade firmware to Version 16. If Hawk is Version 103 or less, then upgrade firmware to Version 104.
D. High current solenoids < 1 Amp	If Sentar Version is 15 or less, then upgrade firmware to Version 16. If Hawk is Version 103 or less, then upgrade firmware to Version 104.

Effective July 1st, 1998, Hawk and Sentar controllers may be factory upgraded for customers experiencing the conditions as defined in items C and D only.

Shipping and handling charges will be required for any factory upgrade.

NOTE: The firmware version of the controller can be observed by depressing the "Review" key on the controller until the display reads the version number (this is the last display of the review function). For example, "SW15" in the display indicates software/firmware version fifteen.

End of Bulletin