

Performa Switch Plate (AC-125S) RFID Proximity Reader

Background

The following will discuss the Performa Switch Plate reader as they are intended to install on an Access Control System by Checkpoint Systems, Inc. This reader is available in two colors; Gray (Model #AC-125SG – Part# 882580) and Off-White (Model# AC-125SW – Part# 347151).

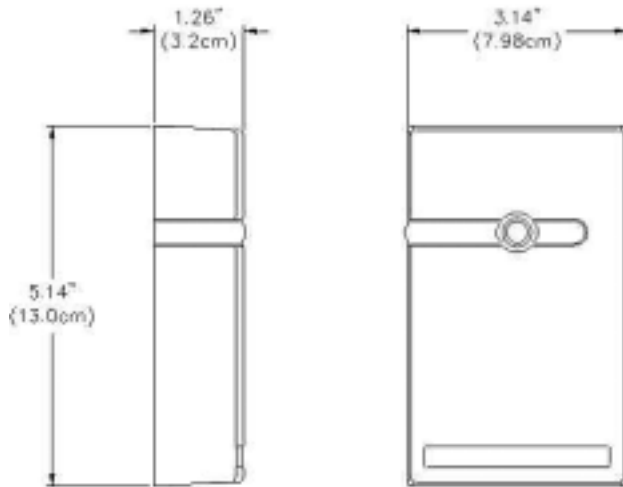
Specifications

The switch plate proximity reader is suitable to mount on metal, such as door mullions, with no impact on performance. This device is designed to use the 26-Bit Weigand data format and is targeted to operate at 12VDC @ 150mA. It is capable of operating between 10.8VDC and 14.8VDC. For these voltages to perform properly, the installation must use Belden 5304FE or equivalent wire.

This proximity reader has a read range of up to 4” using the Performa Proximity Plus Cards from Checkpoint. The reader will transmit a frequency of 13.56MHz and will operate between -22°F and 150°F. The Performa reader carries the FCC Part 15 USA certification.

Performa Switch Plate Reader Dimensions

The following is a drawing of the outer dimensions of this proximity reader.

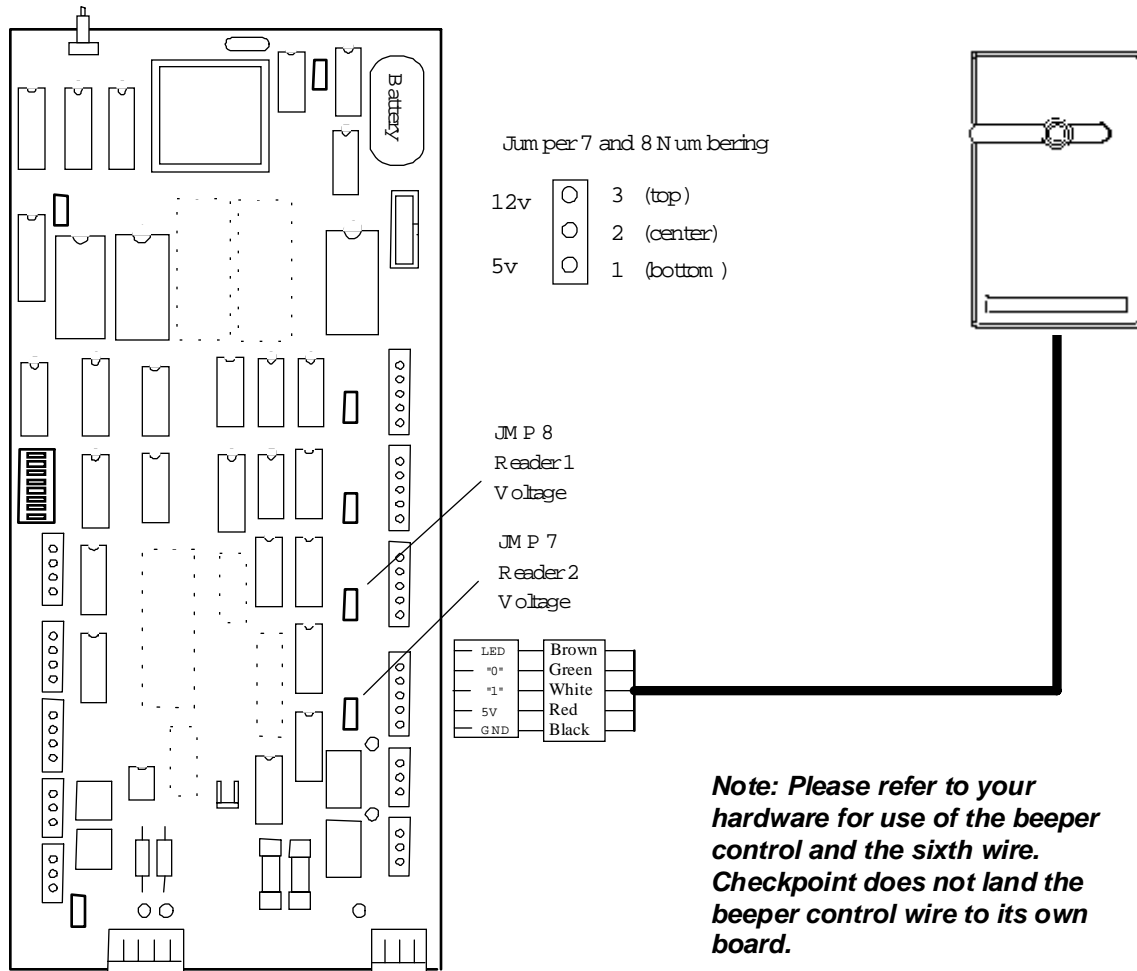


Wiring

The Performa readers come with six wires, but currently only five wires will be used. As mentioned above this reader is a Weigand device and uses the 26-Bit Weigand format. The wire specification is Belden 5304FE or equivalent. The wire is 18 gauge, six conductors, stranded, and shielded. With this wire the reader can mount up to 500’ from the controller, as stated within the Weigand specification. The standard color-coding has been used:

Black	Common
Red	Power for Reader (12VDC)
White	Data 1
Green	Data 0
Brown	LED Control
Blue	Beeper Control (Not Used At This Time)

The following is a diagram of wiring the Performa reader to a Checkpoint Terminal Controller:



Dip Switch Settings

LED and beeper features are controlled by a dip switch pack located on the back of the reader. The first three positions of the dip switch pack is all that is needed to change the output of the LED and beeper. The fourth dip switch is reserved for future use. The following chart shows the dip switch setting and functionality of the LED and beeper. The LED is bi-color and can provide Red, Green, and Amber states. The beeper is a standard piezo or magnetic beeper.

Switches			Note	LED			Beeper	
SW 1	SW 2	SW 3		Ready	Denied	Admit	Denied	Admit
ON	ON	ON		GREEN	R/G FLASH	RED 3s	3 SHORT	NONE
ON	ON	OFF		RED	R/G FLASH	GREEN 3s	3 SHORT	NONE
ON	OFF	OFF		RED	R/G FLASH	NO CHANGE	3 SHORT	1 LONG
OFF	ON	ON		RED	R/G FLASH	GREEN 3s	3 SHORT	1 LONG
OFF	OFF	OFF	1	RED	FLICKERS	FLICKERS	CHIRPS	CHIRPS

Notes:

1. This is a test mode for the reader. This strictly tests the reader itself and indicates no functionality of the Terminal Controller.