Secured Series™ Magnetic Stripe Card Reader

Model: CR500W

The following document describes how to connect and configure the Secured Series Card Reader when using a Hub Max II, Hub MiniMax II, Max 3, MiniMax 3 or HC500P Door Control Module.

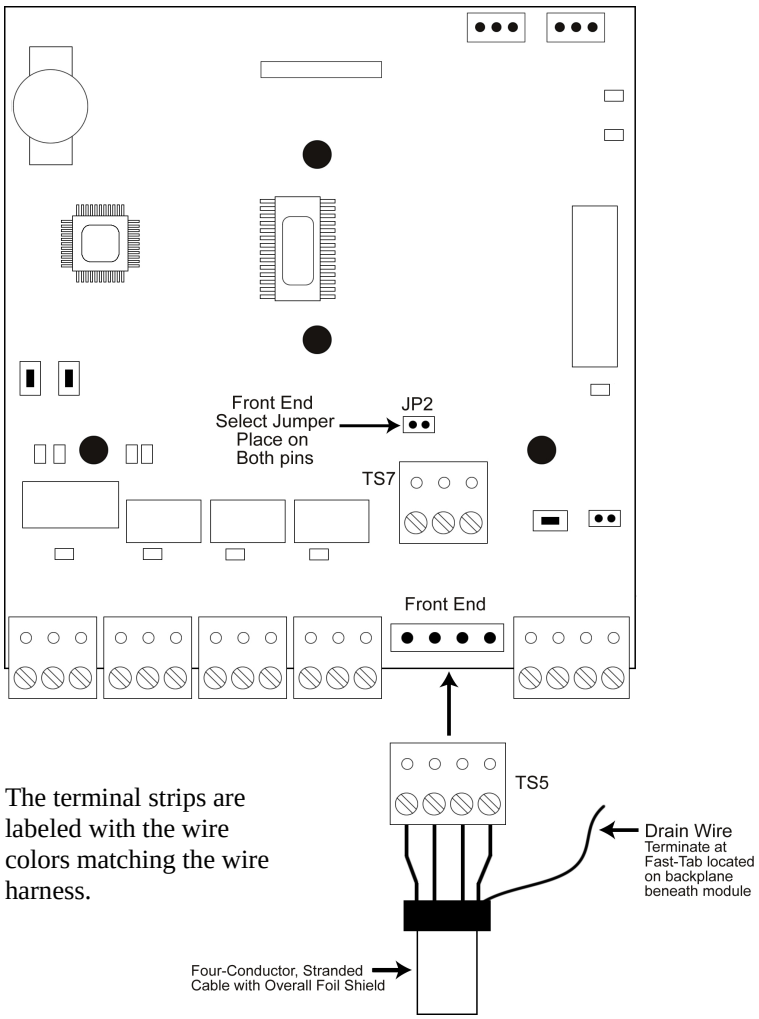
Wiring the Secured Series Card Reader to a Max II or Max 3 DCM

Plug the 4-position wire harness (black, red, white/black and white yellow) into P2 on the Secured Series Card Reader, then wire it to the Front End terminal strip TS5 on the Max II or Max 3 Door Control Module (DCM). Each screw terminal is labeled with a wire color (black, red, white/black and white yellow). These correspond to the color wire on the wire harness supplied with the card reader.

You must use a four-conductor stranded cable with overall foil shield to connect the Front End to the Door Control Module. You also must terminate the drain wire (the bare wire inside the foil shield), from the front end cable, to the fast-tab located on the Backplane. Please refer to the Max II or Max 3 Installation Instructions for the location of the Front End Fast-Tab. **Do not terminate the drain wire at the Front End Reader. Cut off the exposed drain wire and wrap the insulation and the foil shield in electrical tape.**

You can connect up to two readers to each Door Control Module, for In/Out operation by simply wiring them in parallel (both readers to the same four screw terminals).

Note: The **Max 3** Door Control Module must be configured to operate in Secured Series Front End Mode. To do this, locate jumper JP2 above terminal strip TS7 and place the jumper on <u>both</u> pins. **This does not apply to the Max II.**



The terminal strips are labeled with the wire colors matching the wire harness.

Note: The diagram shows the Max 3 DCM, but the Front End connections are the same on the Max II.

<u>Wire Size vs. Cable Length Chart</u>

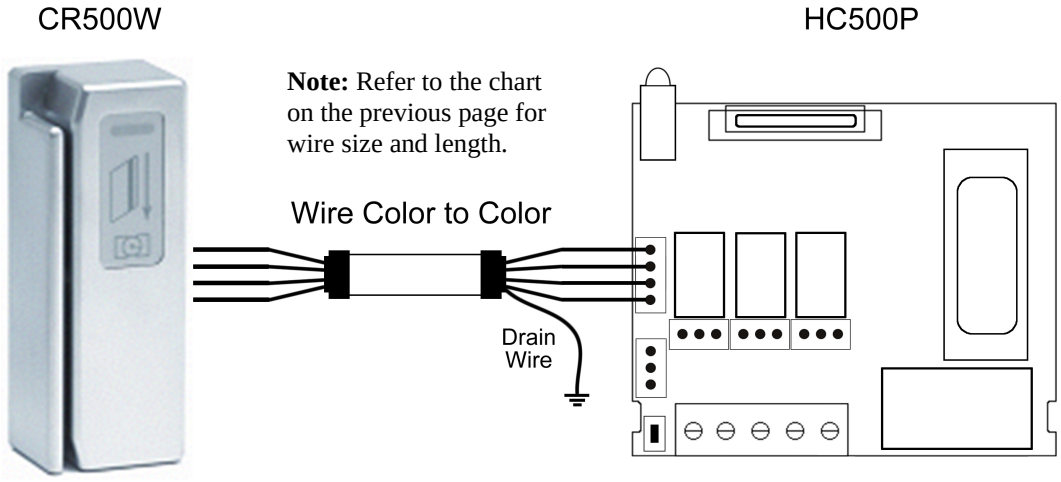
Distance	Wire Size
250 Feet	22 AWG
500 Feet	20 AWG
1000 Feet	18 AWG

This chart applies to the diagram on the following page as well.

Wiring the Secured Series Card Reader to an HC500P Hub Controller

Connect the Secured Series Card reader to the Front End connector on the HC500P relay board. The HC500P and the card reader come with a 4-position wire harness (black, red, white/black and white yellow). Plug one harness into the 4-position connector at the top edge of the HC500P board and the other into P2 on the card reader. Then wire the two together using a four-conductor stranded cable with overall foil shield. You also must terminate the drain wire (the bare wire inside the foil shield), from the front end cable, to V- terminal on the HC500P terminal strip TS1. **Do not terminate the drain wire at the Front End Reader. Cut off the exposed drain wire and wrap the insulation and the foil shield in electrical tape.**

You can connect up to two readers to each HC500P, for In/Out operation by simply wiring them in parallel (both readers to the same wire harness on the HC500P).



Setting In/Out Transaction Event Recording

You can set the Card Reader to record as IN or OUT in the transaction event log in the Door Control Module. First place the Door Control Module in programming mode. Then swipe the IN-OUT SELECT/SELF-TEST magnetic card provided with the unit. If the LED changes from red to green, the reader is set to IN; If the LED changes from green to red, the reader is set to OUT. Next exit program mode on the Door Control Module and swipe the IN-OUT SELECT/SELF-TEST card again to verify the IN/OUT setting by following the LED status indicated previously.

Setting the HI-CO and LOW-CO Jumper

The card reader is capable of reading most High and Low Coercivity magnetic stripe cards (including 300, 2750 and 4000 Oersted). To set the card reader to read High Coercivity (HI-CO) cards place Jumper P3 on both pins. Its should also reader most Low Coercivity (LOW-CO)cards in this setting. If you are using only LOW-CO cards place Jumper P3 on one pin.

Performing a Self-Test

To perform a self-test swipe the IN-OUT SELECT/SELF-TEST card while in normal operating mode. The reader cycles through each LED in the following order: green, yellow, red. Then the In/Out setting is shown, as indicated above and the yellow LED flashes quickly. Swipe the card again to return to normal operation. If this does not happen, this may indicated there is a problem with the card reader. Call IEI Technical Support for help.

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