

CardHopper Service Bulletin (Hopper over vending or hopper run away)

From RKS, Inc. Technical Support

Problem :

If the CardHopper board is utilized with a hopper other than the original Suzo direct drive hopper it was designed for, such as the Excel Hopper, there exists a situation that may cause the hopper to over run and/or vend all the coins in the hopper.

Solution :

Update the CardHopper board with CH4 or better firmware. CH4 is the standard issue firmware from 2-1-2011. If you have units operating with a non-Suzo hopper and want to upgrade, you can either request update IC's or a copy of the HEX file can be emailed to those that can program the part, which is a PIC16F88 MCU. It is a Flash programmable part and the update can be burned over the top of the old version.

The new firmware is compatible with the original Suzo as well as the newer direct drive hoppers.

For any questions or update information, contact Jim or Sandy at 800-360-1960 , 770-460-0872 or email us at support@reallykillersystems.com

Hopper Controller Pin Out

It functions as follows :

All of the hardware is initialized and the unit does a 5 second power on delay.
The STAT LED should flash at a ~2Hz rate.

Any pulses from the card unit (J4) are multiplied or divided by the setting of the DIP switch. If an error occurs, the error lamp is lit and the /enable line to the card unit is deactivated. After the hopper is refilled, or a jam cleared, pressing the reload button will finish any partial dispense.

The PCB Pin Out is as follows :

All connectors are read left to right with pin 1 on left using a square solder pad.

<u>Connector</u>	<u>Pin #</u>	<u>Function</u>
J1 (Power In)	1	+12VDC In
	2	KEY
	3	GND In
	4	GND In
J2 (Hopper *)	1	Ground
	2	Hopper Power (Switched +12V)
	3	KEY
	4	Coin Output
	5	Coin Low Output
	6	Ground

*See Photo(s) for hopper harnessing.

J3 (Outputs)	1	+12V
	2	Meter
	3	+12V
	4	Error Lamp

J4 1 +12VDC to Unit
 (Card Unit) 2 Ground
 3 Credit Pulse From Card
 4 KEY
 5 N/C
 6 /Enable (active low enable to unit)

J5 1 Button N/O
 (Reload Button) 2 Button COM

CardHopper DIPSwitch Options					
Description	Value	Switch Number			
		1	2	3	4
Number to Multiply or Divide by	1	0	0	0	
	2	1	0	0	
	4	0	1	0	
	5	1	1	0	
	8	0	0	1	
	10	1	0	1	
	12	0	1	1	
	15	1	1	1	
Mult / Div	Multiply				0
	Divide				1