Ser_Card

RS-232 to Card Dispenser

Overview :

The Ser_Card accepts RS-232 data at several BAUD rates from any source and utilizes the data to control the behavior of an Asahi-Seiko (or equivalent) card dispenser, with or without feedback to the controlling system. It has been designed to meet the needs of OEMs embedding PC's into games or other systems that require card dispensing. It alleviates the need for custom hardware or software to control a card dispenser in realtime. The actions of the Ser_Card are very user/programmer friendly and all options are DIP switch selectable.

Technical Details :

PCB dimensions	:	3.00" by 3.00"
RS-232	:	DB-9 , DSR,DTR control, CTS,CTR shorted
Data Format	:	2400, 4800, 9600, 19200 BAUD 8 data bits, 1 stop bit, no parity
Power	:	12VDC @ 1 Amp (wall wart, or PC supplied)
Misc	:	Output for 5V Mechanical Meter. Supplied with cable for Asahi-Seiko Dispenser.

How to control the unit :

Just send the Ser_Card a data byte 0-255 and that is number of cards to be dispensed. The Ser_Card can buffer up to 32 data bytes. By setting the hand shaking to the desired level you can achieve as much or as little direct control as you need.

DIP Switch Explanations

(See Chart)

BAUD Rate : Selects the data rate of the link (2400 to 19.2K)

Hand Shaking : How the unit responds back to the main system.

NONE - No feedback to the controlling system. During a malfunction the unit will wait for a card reload and then dispense any owed cards.

ON_ERROR - The unit will transmit the upper case 'E' (0x45) if the dispenser runs EMPTY, an upper case 'J' if the unit is JAMMED, or an upper case 'L' if the unit is running low.

FULL - Same as ON_ERROR, but an upper case 'C' is sent after every valid card dispense cycle.

DTR/DSR flow control : While the unit will actually always accept data it will only transmit any feedback data when DSR is active on the controlling system if this option is turned on..

Misc:

Sending the unit a NUL (0x00) will cause it to respond with an ACK (0x06) if the unit is powered up and ready to go. The unit will also send an ACK (0x06) if handshaking is set to ON_ERROR or FULL and an error condition is cleared, to let the controlling system know the card dispenser is ready to accept data again.