LE5330 MOTORIZED MAGNETIC CARD ENCODER
Specifications
RS232c Protocol, V0.7

Summary

1. Overview

The LE5330 a motorized magnetic cards reader/encoder of the newest generation, with the RS232c interface.
The LE5330 only operates under PC control

2. General specifications

Accepted cards:	Laminated Plastic PVC (non-transparent) with a thickness between 0.85 and 0.5mm
Card Transport:	Motorized at 150 mm/s by NEURON* MTM690*
Read/write	3 tracks ISO 7811 Lo-Co or Hi-Co switchable.
Storage Capacity	210 0.76mm cards
Minimum card detection:	approx. 25 cards
Communication:	EIA RS232c 9600 N 8 1
Range:	15 meters
Power Supply:	100V at 250V 50-60Hz
Consumption:	12 VA
Operating Conditions:	indoor use only
	Temperature range: 0 – 40°C
	Humidity range: 30 – 80%
Dimensions:	180(L) 80(H) 200(P) (mm)
Weight:	approx 2 kg

3. Functions

Front:
Slot for card entry/exit (bezel), with green LED controlled by the computer software

Back:
SubD 25 com, power connetor and ON/OFF switch.

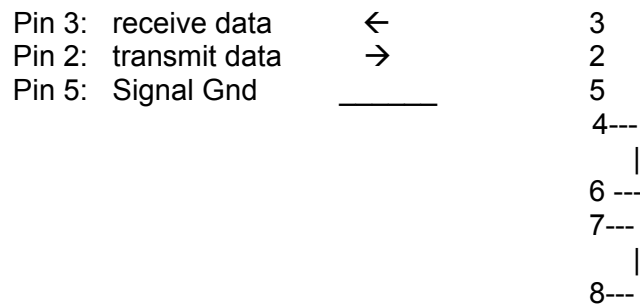## 4. Physical specifications of transmission and pin out connectors

Transmission mode:asynchronous, EIA RS232c
Format: 96,N,8,1

Characters service:
Stx command : '**!**'   21hex
Stx command : '**(**'   3Chex
Etx: '**cr**' 0dhex

Connexion

LE5330 25 pins Sub-D fem.   PC pins Sub-D m.

Pin 3:   receive data   ←   3
Pin 2:   transmit data   →   2
Pin 5:   Signal Gnd   _____   5
                                              4---
                                               |
                                              6 ---
                                              7---
                                               |
                                              8---

A power cable and serial cable are provided with each LE5330

5. Command definitions and status word

Command   **definition**

! S cr **21h 53h 0dh**   status word request

! H cr **21h 48h 0dh**   Hi-Co mode

! B cr **21h 42h 0dh**   Lo-Co mode

! E [x] [data] cr 21h 45h ....0dh writes the data [data] on specified
    [x]= '1' track 1   track [x]
    [x]= '2' track 2
    [x]= '3' track 3
    [data] see ISO 781x compliances

! X A cr   **21h 58h 41h 0dh**   presents the card on the bezel

! X R cr **21h 58h 52h 0dh**   internal capture of card

! L [x] cr 21h 4Ch 31h 0dh   accepts the card presented on the bezel, read
                                         the specified   track [x] and transmits data

C   **43h**   clear any read or write pending command

After executing a command, the DE 5240 always sends the status word   **! [s] cr**

6. Status and Firmware Version

(s) status word (1 byte)

Bit 0: = 1, if writing has been successful.
Bit 1: = 1, if reading has been successful
Bit 2: = 1, if a card is detected on the bezel
Bit 3: = 1, if a card in the R/W mechanism
Bit 4: = 1, if the card level inside the stacker is < 30
Bit 5: = 1, if no more card inside the stacker
Bit 6: = 1, indicates a mechanical problem, or jam.

The firmware version allows the software application to know the no. of the firmware version of the dispenser.

7. Transmission protocol

Principe

The host sends commands, then the LE5330 executes and sends automatically the status word (+ data with read command)

The Host cannot send a new command before receive the status word, which is the acknoledge of the previous commande.

In this case, the next command is lost.

Writes data on specified track

LE5330 takes a card introduce it in R/W mechanism, writes the data on specified track, and then executes a read after write to verify if writing has been successful
.

Host   LE5330

! E 3 12345678901234567890 cr(track 3)   →

After complete operation, LE5330 sends:

                                                    ←   **! [s] cr**

 The bit # 0 is set to 1 if writing operation is a success.

Read and sends data

LE5330 read a card. The card can be introduce on bezel, or can already be inside the R/W mechanism.

Host   LE5330

! L 3 cr (in the example: track 3)   →

After complete operation, LED5330 sends:

                                    ←   **! [s] [data reading] cr**

if the read operation has been successful, the bit #1 of status word is set to 1

If an error occurs, the bit # 1 of status word is set to 0, and the data field is not sent.

Card ejection command

LE5330 can carry the card present inside the R/W mechanism in several modes:

Host   LE5330

- Present the card on the bezel
! X A cr   →

- Full eject backward
Host   LE5330

! X R cr   →

                                                    ←   **! [s] cr**

Status request

LED5330 can sends his status word on a host request at any time, exept if LED is executing a operation. Then, the command is lost.

Host   LED5330

! S cr   →
LED return
                                                    ←   **! [s] cr**