

SERIES 7400 PARTIAL INSERTION MAGNETIC STRIPE CARD READER

Introduction

The Series 7400 Magnetic Stripe Card Reader is an OEM peripheral with an integral controller and a TTL-level ASCII (Type SA), RS-232C (Type SE) or USB interface.

Operation of the Series 7400SA OEM Peripheral is under the Host software control. The interface connections to the Series 7400 are described below.

SA/SE Models Only

Power

The Series 7400 requires a +5VDC, $\pm 5\%$ power supply at a nominal 150 ma continuous. The +5VDC supply should be connected to both Pins #19 and #20 and the DC return should be connected to both Pins #17 and #18 of the interface strip-line connector J1.

Interface Connection

The input/output circuits of the Series 7400 are connected to the Host system by means of an unshrouded 2x10 strip-line connector (0.025" square posts) and marked "J1." The J1 connector pinouts are shown in the table on the following page.

IMPORTANT NOTES ON INTERFACE CIRCUITS:

1. Each J1 input/output circuit will handle one TTL load.
2. The transmit enable circuit **CLEAR TO SEND** must be serviced by the interface mate (i.e., Host) or be tied low.
3. The card detect circuits **CARD DETECT FRONT** and **CARD DETECT REAR** indicate the presence and location of a card in the module.

Interface Connections

J1 Pin

TTL Circuit

1	-RESET (Input, Active Low)
2	TRANSMIT DATA (Output, 1 = +5VDC)
3	RECEIVE DATA (Input, 1 = +5 VDC)
4	-REQUEST TO SEND (Output, Active Low)
5	-CLEAR TO SEND (Input, Active Low)
6	-TERMINAL IN SERVICE (Output, Active Low)
7	-CARD DETECT REAR (Output, Active Low)
8	-CARD DETECT FRONT (Output, Active Low)
9	-REMOTE SENSE #2 (Input, Active Low)
10	-REMOTE DEVICE #1 (Output, Active Low)
11	-REMOTE DEVICE #2 (Output, Active Low)
12	-N.C.
13	-N.C.
14	-LAMP #2 (Output, Active Low)
15	-LAMP #1 (Output, Active Low)
16	-REMOTE SENSE #1 (Input, Active Low)
17	0 VDC GROUND
18	0 VDC GROUND
19	+5 VDC
20	+5 VDC

Communications Protocol

The protocol configuration is determined by jumpers at an eight-station strip-line footprint on the Module PC-board labeled A-H.

The locations of the required jumpers for a selected communications protocol are given in the following tables.

Note: A jumper must be provided at A-H locations marked "YES" to obtain the selected communications protocol.

<u>Baud Rate</u>	<u>A</u>	<u>B</u>	<u>C</u>
1200	YES	YES	NO
2400	NO	YES	NO
4800	YES	NO	NO
9600	NO	NO	NO
19200	NO	NO	YES

<u>Word Length</u>	<u>Parity Bit</u>	<u>Stop Bits</u>	<u>D</u>	<u>E</u>	<u>F</u>
7-bit word	EVEN	two	NO	NO	NO
“	ODD	“	YES	NO	NO
“	MARK (1)	“	NO	YES	NO
“	SPACE (0)	“	YES	YES	NO
“	none	“	NO	YES	YES
8-bit word	EVEN	one	NO	NO	YES
“	ODD	“	YES	NO	YES
“	none	two	YES	YES	YES

Line-Feed (G)
NO (CR)
YES (CR, LF)

Echo (H)
no
yes

Example: With no jumpers at any of the locations A-H, the communications protocol is 9600 baud, 7-bit word length with even parity bit and two stop bits, a CR is used as the transmission terminator and no echo of received transmission by the Series 7400.

USB Models Only

The Xico reader USB interface is Version 1.1 compliant and is an HID device. For enumeration phase the following data is needed:

VID = 0C04h	Vendor ID
PID = 01C0h	Product ID
RID = 2	Report ID for transmitted data

Data sent from the Xico reader will be found in endpoint 1 (Interrupt).
Commands sent to the Xico reader are sent from endpoint 0 (Control) using a Set Feature command

Power

The 7400 USB draws its power from the USB bus, thus no separate power supply is required.