

ISO15693 UID Reader

SLR700 Instruction



April 19, 2005

REV.C

Understand ISO15693 UID

The Smart-Label are uniquely identified by a 64 bits unique identifier (UID). This is used for addressing each Smart-Label uniquely and individually, during the anti-collision loop and for one-to-one exchange between a SLR700 and a Smart-Label.

MSB

LSB

64	57	56	49	48	1
E0		IC Mfg Code		IC manufacturer S/N	

The UID comprises:

The 8 MSB bits shall be 0xE0,

The IC manufacturer code, on 8 bits according to ISO/IEC 7816-6/AM1,

A unique serial number on 48 bits assigned by the IC manufacturer.

Specifications

Power Supply	Min:5.5Vdc,Max:13.2Vdc/150mA, reverse voltage protected Linear supply recommend, typical with a 9V supply.
Interface	Wiegand : 26 bits. ABA-TK2 : 10 DEC Code,40IPS. RS232 : 19200,n,8,1
Read Range	2~5cm
Frequency	13.56MHz
Transponder	UID Read Only
Indication	Internal Red/Green LED and Buzzer. Ready : Red On / Green Off (Brown = High) Card Present: Green Blink / Beep x 1
Dimensions	8.3 x 4.7 x 1.6 mm
Operating Temperature	-10 ~ 60 Deg C.
Operating Humidity	10% ~ 95%
Interface Cable	90 cm

Wires Assignment

Red	Power DC 6~12V
Black	Power GND (Ground)
Yellow	RS232 Output (TXD)
Blue	1.Wiegand/ABA-TK2 Output Select 2.RS232 Input (RXD)
Green	1. Wiegand DATA 0 2. ABA-TK2 DATA
White	1. Wiegand DATA 1 2. ABA-TK2 Strobe (CLOCK)
Orange	ABA-TK2 Card Present (CP)
Brown	External LED/Buzzer Control

Caution: When connecting to the Host, attach the ferrite core, which is packed with the SLR700, to the part near the connector of the SLR700 connecting cable.

Output Select

Wiegand Output

Red ----- Power 6~12V
 Black ----- Power GND
 White ----- Data 1
 Green ----- Data 0
 Orange ----- N/C
 *Blue ----- N/C

ABA-TK2

Red ----- Power 6~12V
 Black ----- Power GND
 White ----- Strobe (Clock)
 Green ----- Data
 Orange ----- Card Present
 *Blue ----- Connect to Black

RS232

Red ----- Power 6~12V
 Black ----- Power GND
 Yellow ----- RS232 Output (TXD)
 *Blue ----- Connect to Black

Output Format

RS232 (19200, n, 8, 1)

STX (02H)	DSFID	MSB	UID (16 Hex Code)	LSB	CR	LF	ETX (03H)
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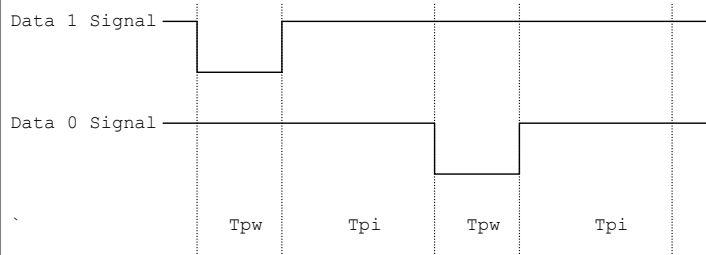
Note:

The Data storage format identifier (DSFID) indicates how the data is structured in the Smart-Label memory. It may be programmed and locked by the respective commands. It is coded on one byte. It allows for instant knowledge on the logical organization of the data. If its programming is not supported by the Smart-Label, the Smart-Label shall respond with the value zero (0).

Wiegand (Standard 26 bits)

P	MSB	UID (6 Hex Code)	LSB	P
EVEN PARITY		ODD PARITY		

Pulse Timing

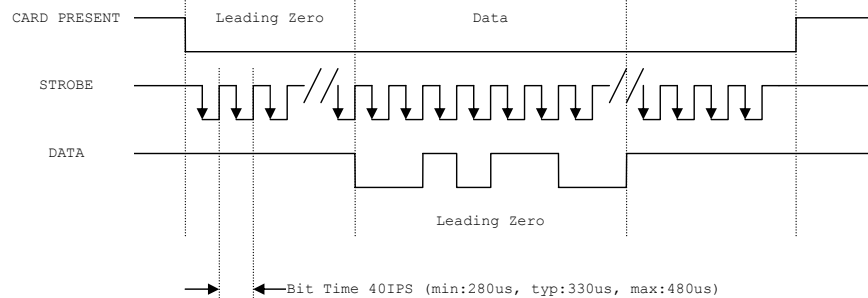


Symbol	Description	Typical Time
Tpw	Pulse Width Time	100us
Tpi	Pulse Interval Time	1.9ms

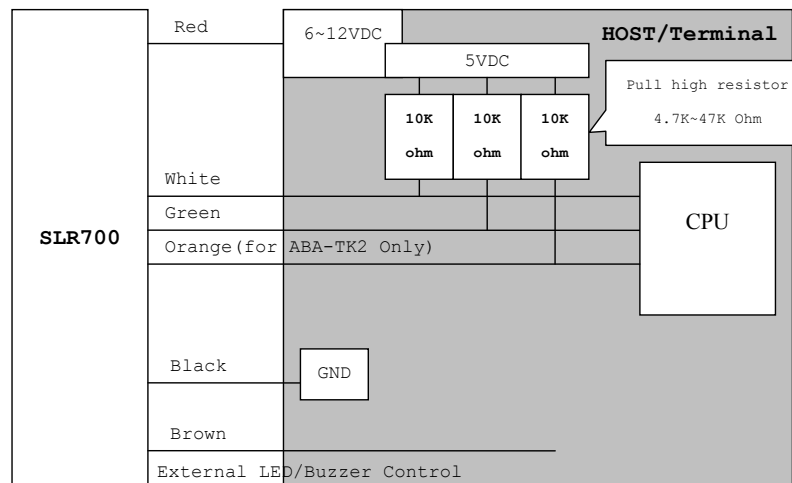
ABA-TK2

10 LEADING ZERO	MSB	UID (20 DIGITS)	LSB	10 LEADING ZERO
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The timing for Card Present, Clock (Strobe) and Data , example as below:



Connection Example (for Wiegand / ABA-TK2)



External LED/Buzzer Control (Brown)

