

DESERIALISATION CABLE, SSI -> PARALLEL OUTPUTS

The deserialisation cable allows the connection of an SSI serial interface encoder to a PLC with parallel inputs

The reduced number of wires in the encoder connecting cable allows the customer to mount the card near the automat at a lower cost than an equivalent parallel encoder

Parallel outputs are push-pull type



Power supply	11 to 30 Vdc
Introduction	< 1 s
Encoder output	RS422 Level (SSI standards)
Encoder input	RS422 Level (Clock)
Parallel outputs	Push-pull, protection against short circuits
Transmission frequency	260kHz (switch 3 on OFF), 100kHz (switch 3 on ON)
Interrogation period	250µs (switch 3 on OFF), 390µs (switch 3 on ON)
Transmission	25 bits encoder without parity With or without transcoding Gray >> Binary, Binary >> Gray
Operating temperature	0 à 50°C

The different possible configurations are switch-programmable directly in the DB37. We would recommend to set all switches to 'Off', and then to configure the encoder using the following table :

Default configuration :



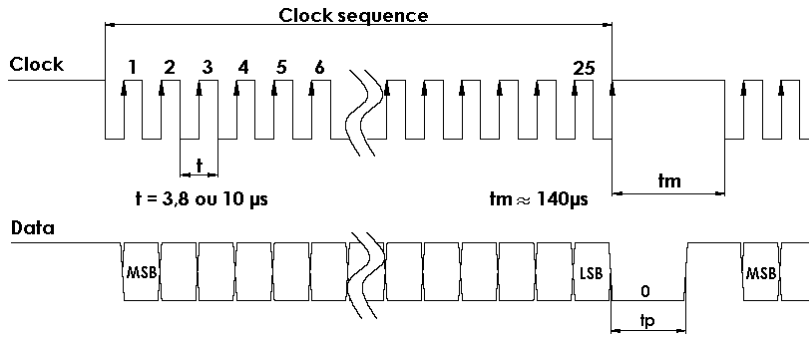
Gray parallel output	1 : OFF
Binary parallel output	1 : ON
Gray code encoder	2 : OFF
Binary code encoder	2 : ON
260kHz frequency	3 : OFF
100kHz frequency	3 : ON
Push-Pull, replacement PNP (inverse NPN)	4 : OFF
Push-Pull, replacement NPN (inverse PNP)	4 : ON*

* The switch 4 on ON inverse the bits

The switch configuration is taken in account when the deserialisation cable is power on

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SSI TRANSMISSION



STANDARD SSI CONNECTION : 12 pinouts female M23 connector

Type	Vcc	Gnd	Clk+	Data+	RAZ / RAX	Data-	Clk-	DIRECTION
S6	1	2	3	4	5	6	7	9

Pinouts 8, 10, 11 et 12 : reserved, do not connect

PARALLEL CONNECTION : 37 pinouts male SUBD connector

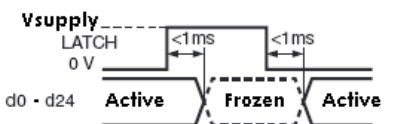
1	Bit 0 output	20	Bit 19 output
2	Bit 1 output	21	Bit 20 output
3	Bit 2 output	22	Bit 21 output
4	Bit 3 output	23	Bit 22 output
5	Bit 4 output	24	Bit 23 output
6	Bit 5 output	25	Bit 24 output
7	Bit 6 output	26	Reserved
8	Bit 7 output	27	RAZ / RAX
9	Bit 8 output	28	SELECT
10	Bit 9 output	29	LATCH
11	Bit 10 output	30	DIRECTION
12	Bit 11 output	31	Reserved
13	Bit 12 output	32	Reserved
14	Bit 13 output	33	Reserved
15	Bit 14 output	34	Reserved
16	Bit 15 output	35	Reserved
17	Bit 16 output	36	+ 11 to 30Vdc
18	Bit 17 output	37	0 Vdc
19	Bit 18 output		

Reserved :

Do not connect

Electronic

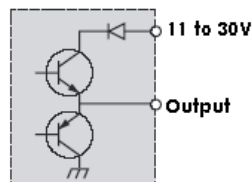
Latch input



"0" level	min 0V	max 0,3 x Vsupply
"1" level	0,7 x Vsupply	Vsupply
I LATCH	< 5mA	

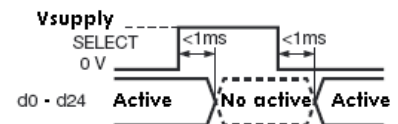
PUSH - PULL

Power supply: 11 to 30Vdc
Max. ondulation: 500mV
Protection against inversion of polarity
Cons. without load: 50mA max.
(typically 30mA at 24V)



Max. current: 20mA
"0" level: 1,5V max.
"1" level: Vsupply - 2,5V
Protection against short circuits

SELECT input



"0" level	min 0V	max 0,3 x Vsupply
"1" level	0,7 x Vsupply	Vsupply
I SELECT	< 5mA	

SELECT and LATCH inputs must be connected to the 0Vdc (do not leave unconnected)

Nota : Pinouts 27 and 30 of the SUBD37 connector are respectively directly connected to the pinouts 5 and 9 of the M23 connector

ORDERING REFERENCE : EAA-005 (1m cable, weight : 230g)

Nota : extension cable for SSI encoder available on simple request

Made in FRANCE