

## SERIAL TO PARALLEL CONVERTER

MODEL: SP-1



## Introduction

Milestone Universal Converter Model SP-1 is a microprocessor based intelligent instrument. It has two conversion modes. 1. Serial RS-232 to Centronics parallel data. 2. Parallel. Data to serial Data. Either mode can be set by DIP Switch.

Specifications:					
Power Supply	230V AC, 50 Hz, 5 Watts				
Serial Port	RS232 D25 Male Connector				
Parallel Port	PC compatible D25 Female Connector				
Communication Parameters	Programmable through DIP Switch				
Communication Protocol	Supports X-On / X-Off, DTR / DSR Signal				
Front Panel Indication	S <> P Serial to Parallel Mode P <> S Serial to Parallel Mode				
Size	100mm x 80mm x 33mm				

## <u>Installation</u>

Set the 8-bit DIP-switch (situated on the right side of the box) positions of the converter to required mode and parameters shown in Table I.

TABLE I / I : DIP SWITCH SETTINGS

<u>SW-1</u>	
ON	Serial to Parallel Conversion
OFF	Parallel to Serial Conversion
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Table - 2 / I DIP SWITCH SETTINGS

SW-1 from DIP switch 2 to 8 settings										
SW2	Stop Bits	SW3	Bits	SW4	SW5	Parity	SW6	SW7	SW8	Baud
ON	2	ON	8	OFF	OFF	NO	OFF	OFF	OFF	19.2K
OFF	1	OFF	7	ON	OFF	EVEN	OFF	OFF	ON	9.6K
				ON	ON	ODD	OFF	ON	OFF	4.8K
							OFF	ON	ON	2.4K
							ON	OFF	OFF	1.2K
							ON	OFF	ON	600
							ON	ON	OFF	300

Before connecting any input and output cable, make sure of the mode selected, particularly while connecting parallel cable. If converter is used as a serial to parallel converter, parallel cable should be connected between parallel port of converter and input parallel port of receiving device. Similarly, if converter is used as a parallel to serial converter, parallel cable should be connected between parallel output port of the sending device and parallel port of the converter. Similar care should be taken while connecting serial RS-232 cable. RS-232 pin connections are given in TABLE II.

TABLE II

RS-232 SERIAL PORT CONNECTIONS (D-25 MALE CONNECTOR)				
Pin No.	Signal			
2	Тх			
3	Rx			
6	DSR			
7	GND			
20	DTR			



## PARALLEL PORT (D25 FEMALE CONNECTOR)

The Pin connections are identical to PC Printer Port connections.

Once all the parameters of converter and those of both the input and output devices are set properly to match with one another, downloading from input device can be carried out to effect the required operation.