

**\*OPERATING MANUAL\***

FOR

RS232 TO RS485/RS232 SPLITTER

MODEL LD-1044UD

## INTRODUCTION

Milestone model LD-1044UD is a RS232 to RS422/RS485/RS232 converter- splitter is designed for high-speed data transmission between computer system and or peripherals over long distance under high noise conditions. They provide dual line interface per signal.

## APPLICATIONS

Application for these converters can be for factory automation, programmable logic controllers, attendance recording systems, Barcode Readers, remote data transmission, remote terminals, EPABX

## SPECIFICATIONS

Input	One RS232 Input - TxD, RxD, GND (D9 Female connector)
Output	4 RS485 Outputs – +Tx/Rx, -Tx/Rx (D9 Male Connectors). Each signal is protected by spike suppressor and has opto-isolation.  4 RS232 Outputs- Tx, Rx , GND (D9 Male Connector).
Max. Distance	1.2Kms. @ 19,200 bps for RS485 O/P
Output Cable	Twisted pair cable-90 ohms/km for RS422 O/P.
Transient Protection	2500 V Peak
Front Panel Indications	Power, TD
Power Supply	Mains Input-230V, 50 Hz
Power	Max. 50 VA Built-In Power Supply

## INSTALLATION INSTRUCTIONS

**TABLE I: RS 232 Port – D9 Female Connector**

<b>Pin No.</b>	<b>Signal Name</b>	<b>In/Out</b>
2	Tx Out	Output
3	Rx In	Input
5	Signal Ground	-

**TABLE II: RS422/RS485 Output port-D9 Male connector**

<b>PIN No.</b>	<b>Signal</b>	<b>In/Out</b>
5	+Tx/Rx-B	IN/OUT
6	-Tx/Rx-A	IN/OUT
7	GND	---

**TABLE  
232**

### III: RS Output D9 Male Connector

<b>PIN No.</b>	<b>Signal</b>	<b>In/Out</b>
2	Rx	IN
3	Tx	OUT
5	GND.	---

### LED Indication:

- A. Power - Power to the Unit
- B. TD - Tx Data on RS485 & RS232

**TABLE IV:****RS 232 Cable for input**

Computer End			RS232 Port	
No. (D-25F)	Pin No. (D-9F)	Signal	Pin No. (D-9) Male	Signal
2	3	Tx	3	Rx
3	2	Rx	2	Tx
7	5	GND	5	Sig.Gnd

The above connections are for Standard PC COM Port. Please verify these connections for any other system or terminal before making the cable.

### **LONG DISTANCE CABLE LAYING**

Long distance cable between two RS422/RS485 interfaces must be a twisted pair shielded cable. The pair should be used for each signal type + and – signal. This gives high common mode noise rejection. While laying the cable, care should be taken not to lay this cable parallel to power line cables. The cable resistance should not be more than 90 ohms/1000 meters. The cable should be run through conduit pipe for physical protection.

**TABLE V: OUTPUT CABLE**

D9 Male	Pin No.	Instrument
+Tx	5	+Rx
-Tx	6	-Rx

