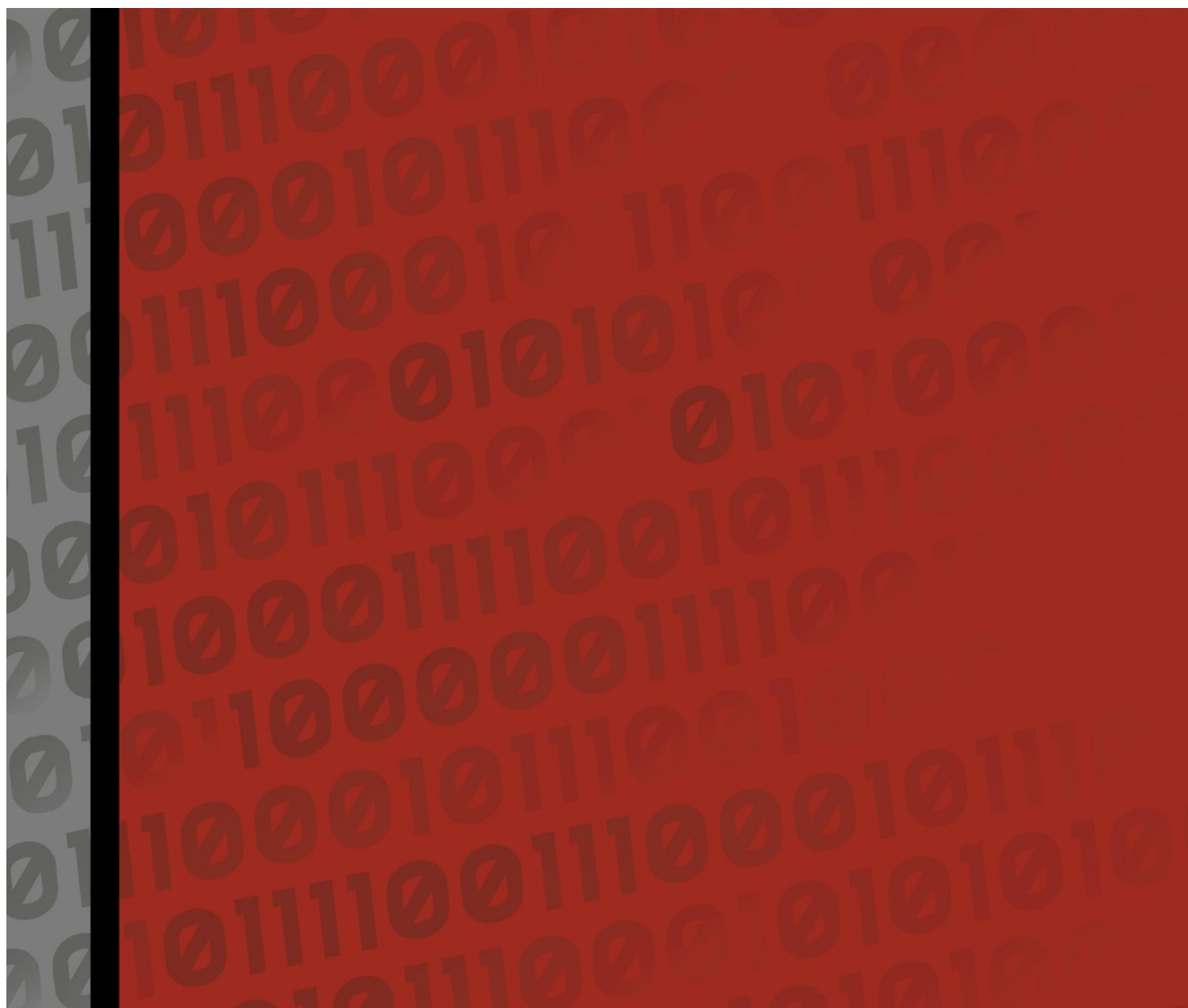




4 port PPS splitter

User Manual



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1. Introduction

The MGB-Tech 4 port PPS splitter is a powerful, easy to use PPS splitter capable to distribute serial port communication and PPS signals to up to 4 listeners.



2. Features

- PPS input triggers on both 3.3V and 5V TTL levels
- Two front panel selectable inputs
- Front panel LED indicates PPS activity
- Outputs can directly drive a 50 Ohm load
- Pulse stretching (the PPS pulse is stretched to a minimum length of 25 ms)
- 10-30 VDC power supply
- Compact lightweight desktop casing
- True RS-232 signal levels
- Supports baudrates up to 115200

3. Operation

The unit is able to split RS-232 and PPS signals, but both are processed in different ways.

3.1. RS-232

The splitter has two serial input ports A & B. These are amplified and drive output ports 1 to 4. This is one way communication, so it is not possible to drive the serial inputs through the serial output ports. The front panel switch position has no influence on the serial port behaviour.

3.2. PPS-pulse

The unit is equipped with two PPS inputs. Depending on the position of the front panel switch, one of these inputs is selected, stretched, amplified and outputted on the 4 output ports. With every PPS pulse, the front panel PPS led will toggle between the ON and OFF state.



Typical risetime and distribution of the PPS outputs with 2ns/div horizontal scale

3.3. Power supply

A wide input 10-30VDC power supply is used. Provide a 15Watt power supply for stable operation. A front panel LED will indicate the presence of a power source.

4. Pinouts



RS-232 Input

9P Sub-d male DTE

Pin 2	RX
Pin 5	GND
Pin 6	DCE
Pin 8	CTS

RS-232 Output

9P Sub-d female DCE

Pin 2	TX
Pin 5	GND
Pin 6	DCE
Pin 8	RTS

BNC female input & output

Center	PPS pulse
Outer	GND

3P male DIN power connector

Pin 2	V+ (10 – 30 VDC)
Pin 3	GND

5. Mechanical

Dimensions : 31cm x 29cm x 7cm (w x d x h)

Weight : Approx 1.3 Kg