

## PRODUCT SHEET

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## **USB-TTL INTERFACE**

USB-TTL Interface is a USB module which provides 16 TTL I/O lines that can have up to millisecond accuracy. It may be used to replace parallel port interfaces, which are no longer common on computers. This interface may be used for custom programming or for sending/receiving information from E-Prime, SuperLab, or other stimulus presentation programs.

**USB TTL Module:** Millisecond accurate\* event marking across up to 16 I/O lines.

**Gender Changer:** Use to connect the USB-TTL to an STP100D for MP160/150 System, directly to I/O Port on MP36/36R, or other 25-pin male device.

**USB Lead:** Use to connect the USB-TTL Module to the Host PC.

## Key features:

- 16 Digital +5 V TTL Lines
  - o 8 TTL Input
  - o 8 TTL Output
- TTL Input Lines configured as an 8 bit port
- TTL Output Lines configured as an 8 bit port
- Change detection on TTL Input lines
- TTL Input to 2 hex bytes conversion representing 255 possible states
- Event marking: 2 hex bytes to TTL Output across 8 bit port representing 255 possible states
- TTL Output lines automatically latch once set
- Works out of the box with PCs/Macs/Linux—fully plug in & play
- Appears as a Virtual Com Port (VCP)
- Compatible with all Psychology experiment generators, e.g., E-Prime, SuperLab, Presentation, Inquisit, DMDX, ERTS, DirectRT, PsyScope, PsychoPy, OpenSesame, etc.
- Works with any software that can access a standard serial port
- Comes complete with timing validation software which checks round trip timing on your PC
- Fully documented API complete with examples
- Small and unobtrusive—Dimensions (WxHxD): 67.1 mm x 28.2 mm x 67.1 mm
- LED indicators for Input (green) and Output (red)
- Full-speed USB 2.0 (compatible with USB 3.0)
- Scans for TTL I/O changes 109,000 times each second
- Millisecond accurate TTL event marking\*
- Utilizes The Black Box Toolkit technology



<sup>\*</sup>Accuracy may be limited by PC and experiment generation software selected for stimulus presentation.