8-bit Workbench™

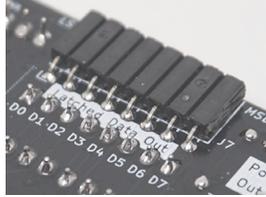**Power LED**
Check if the board has +5V power.

Latched Data Out
Outputs the 8-bits being displayed. Use the TTL compatible signals with the backside connector.

Digit Display
Shows the *hexadecimal* or *octal* representation of the current binary value. The dot on the right lights up for octal values.

USB Power
Provide +5V with a *Mini-B* USB connector. Use a power bank or other USB device to supply power.

Power In
Optionally, use a custom power supply to have more voltage rails (+12V and -12V) available. For example a *Mean Well PT-65B* can be used.

Extra Power Out
Do 16-bit experiments by attaching a second 8-bit Workbench™ at the left edge. Or just use it as an extra *Power Out* connector (with all voltage rails).

Annotated Byte
Get a quick understanding of the data value across different number systems.

Clock Triggered
The Workbench follows the data on the bus as long as the Clock remains *high*. It stores the data when the Clock goes *low* until the next *high*.

Debounced Button
Push the *clicky* Digitast button to output a properly debounced Action-signal, to use with a microprocessor or TTL gate.

Bit Settings
Depending on the type of data (e.g. *ASCII* or *Baudot*), the three most significant bits (bit 5 to 7) can be turned off.

Extension Interface
Connect with experiments, breadboards or vintage computers. Attach extension boards (like a *Super Breadboard* or *Binary Keyboard*) at the bottom edge. Instead, design your own!

Signal Control
The Action-*output* and Clock-*input* can be inverted using jumper settings. Also, these two signals can be tied together.

Display Settings
Switch between *hexadecimal* and *octal* digit display. Turn the individual digits on/off.

Board labels

High Nibble — Hex — Low Nibble

Bits	Parity/7	6	5	4	3	2	1	0
Hex	80 FF	40	20	10	8 F	4	2	1
Oct	200 377	100	40 77	20	10 17	4 7	2	1
Dec	128 255	64	32	16	8 15 (max)			

Ext. ASCII EBCDIC — ASCII Fieldata — SIXBIT BCDIC — Baudot Murray

Enable Bits — ON — Off — SW2

1-2 / 2-3 Normal / Inverted — JP8+9 — Signal

Action — Action Debounced — JP8

A → C — JP10 — Clock

Clock — JP9-

Byte — Clock — LSb — MSb

Off — Hex — Display — Digits — ON — Octal — SW3

Power Out — +5V GND — +12V -12V

Action — Deposit