## L-02 Breadboard Hexadecimal Display

## Features

The L-02 breadboard hexadecimal display module takes an 8-bit input and displays it on a pair of 7-segment displays.

This module is especially suitable for digital logic experiments.

The direction of the bit can be configured with a solder jumper on the back of the module. The most significant bit can be either on the left or on the right.

This module utilises the Holtek HT66F3185 microcontroller. To maintain proper brightness of the 7-segment displays, the supply voltage of the module should be kept at 5V.



Figure 1: The assembled module.

## **Pin Configuration and Functions**

Pin name	Description
VDD	Voltage supply
INx	Inputs
GND	Ground

The module has 10 pins. The 8 inputs are situated on the middle 8 pins.

There are 2 operating modes that can be set by the solder jumper on the back of the module.

	Mode 1	Mode 2
Solder jumper	Open	Shorted
Input direction	Most significant bit on right	Most significant bit on left
ing dis	put: $0 \longrightarrow 7$ play: $[7:4]$ $[3:0]$	<b>η ← − 0</b> [η:4] [3:0]

In both modes, the lower 4 bits are always displayed on the right digit and the upper 4 bits are always displayed on the left digit.

## Notes

- 1. Do not leave data input floating, or the display output will be unpredictable.
- 2. The module will work with lower supply voltage, but the display brightness will be low. This issue will be fixed in the next revision.