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**4D SYSTEMS**  
*TURNING TECHNOLOGY INTO ART*

## **4D Raspberry Pi Serial Adaptor** **4D-Serial-Pi-Adaptor**

**DATASHEET**

**Document Date: 21<sup>st</sup> August 2014**  
**Document Revision: 1.2**

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## 1. Description

The 4D Pi Serial Adaptor (4D-Serial-Pi-Adaptor) is a simple Raspberry Pi\* adaptor designed to provide a convenient interface to attach 4D Systems display modules to the Raspberry Pi platform, without having to use jumper wires on the Raspberry Pi headers.

The 4D Pi Serial Adaptor is included in various 4D Systems -PI Module Packs, but can be purchased separately if a 4D Display Module is not required or is owned already.

Communication to the 4D Systems Display Modules is performed via the Raspberry Pi's serial port (RX and TX), and is provided to the user in a simple 5-pin interface, where a 5 way cable (included in the -PI Module Packs) can be attached between the adaptor and the Display Module.

Power for the display is supplied from the Raspberry Pi's 5V bus. No external power is required for the Display Module as all power is supplied from the Raspberry Pi, via the Adaptor. Please ensure the Raspberry Pi is powered with a suitably powered 5V power pack.

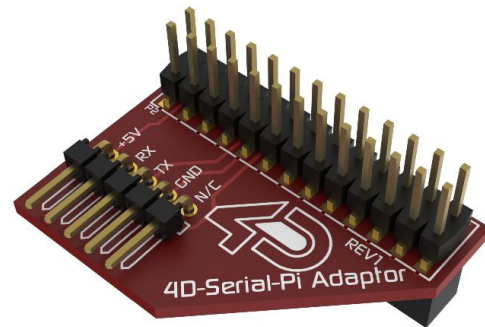
The 4D Serial Pi Adaptor is compatible with versions A, B and B+ Raspberry Pi's.

The 4D Serial Pi Adaptor is compatible with essentially all 4D Systems Intelligent Displays, primarily the following:

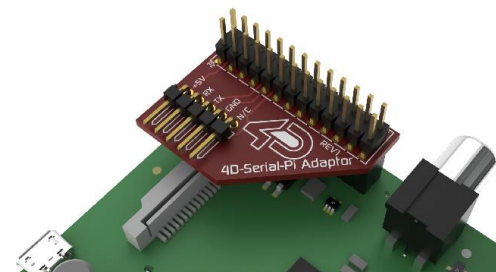
- uLCD-24PT
- uLCD-28PT
- uLCD-32PT
- uOLED-96-G1/G2
- uOLED-128-G1/G2
- uOLED-160-G1/G2
- uLCD-144-G1/G2
- uLCD-43 (All versions)
- uLCD-24-PTU
- uLCD-28-PTU
- uLCD-32-PTU
- uLCD-32W-PTU
- uLCD-35DT
- uLCD-70DT
- uLCD-220RD

The 4D Raspberry Pi Library is available to download from the 4D Systems website, [www.4dsystems.com.au](http://www.4dsystems.com.au)

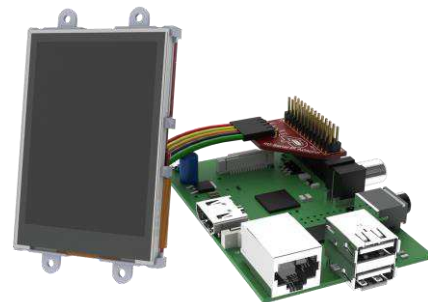
For information regarding the modules which connect to this 4D Pi Serial Adaptor, please refer to their product pages and Datasheets.



4D Pi Serial Adaptor



4D Pi Serial Adaptor attached to a Raspberry Pi



4D Pi Display Module Pack  
(4D Pi Serial Adaptor is one part of this pack)

**NOTE (\*):** Raspberry Pi remains the property of the Raspberry Pi Foundation. All references to the words 'Raspberry Pi' are Trademarks of the Raspberry Pi Foundation, and all references to 4D Systems modules/adaptors with the Raspberry Pi are based on compatibility with the Raspberry Pi Hardware, and do not indicate ownership of or to the Raspberry Pi in any way.



## 2. Specifications and Ratings

RECOMMENDED OPERATING CONDITIONS					
Parameter	Conditions	Min	Typ	Max	Units
Supply Voltage (VCC)		4.5	--	5.5	V
Operating Temperature		-10	--	+70	°C
UART Voltage	Raspberry Pi is 3.3V only. 4D System modules are 3.3V also but are 5V tolerant		3.3		V

ORDERING INFORMATION
<b>Order Code:</b> 4D-Serial-Pi-Adaptor
<b>Package:</b> 65mm x 50mm x 30mm
<b>Packaging:</b> Module sealed in antistatic foam padded 4D Systems Box

### 3. Legal Notice

#### Proprietary Information

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