Raspberry Pi 7" Touch Screen Display

Fact Sheet

Description

The 7" Touch screen Monitor for Raspberry Pi gives users the ability to create all-in-one, integrated projects such as tablets, infotainment systems and embedded projects. The 800 x 480 display connects via an adapter board which handles power and signal conversion. Only two connections to the Pi are required; power from the Pi's GPIO port and a ribbon cable that connects to the DSI port present on all Raspberry Pi's. Touch screen drivers with support for 10-finger touch and an on-screen keyboard will be integrated into the latest Raspbian OS for full functionality without a physical keyboard or mouse.
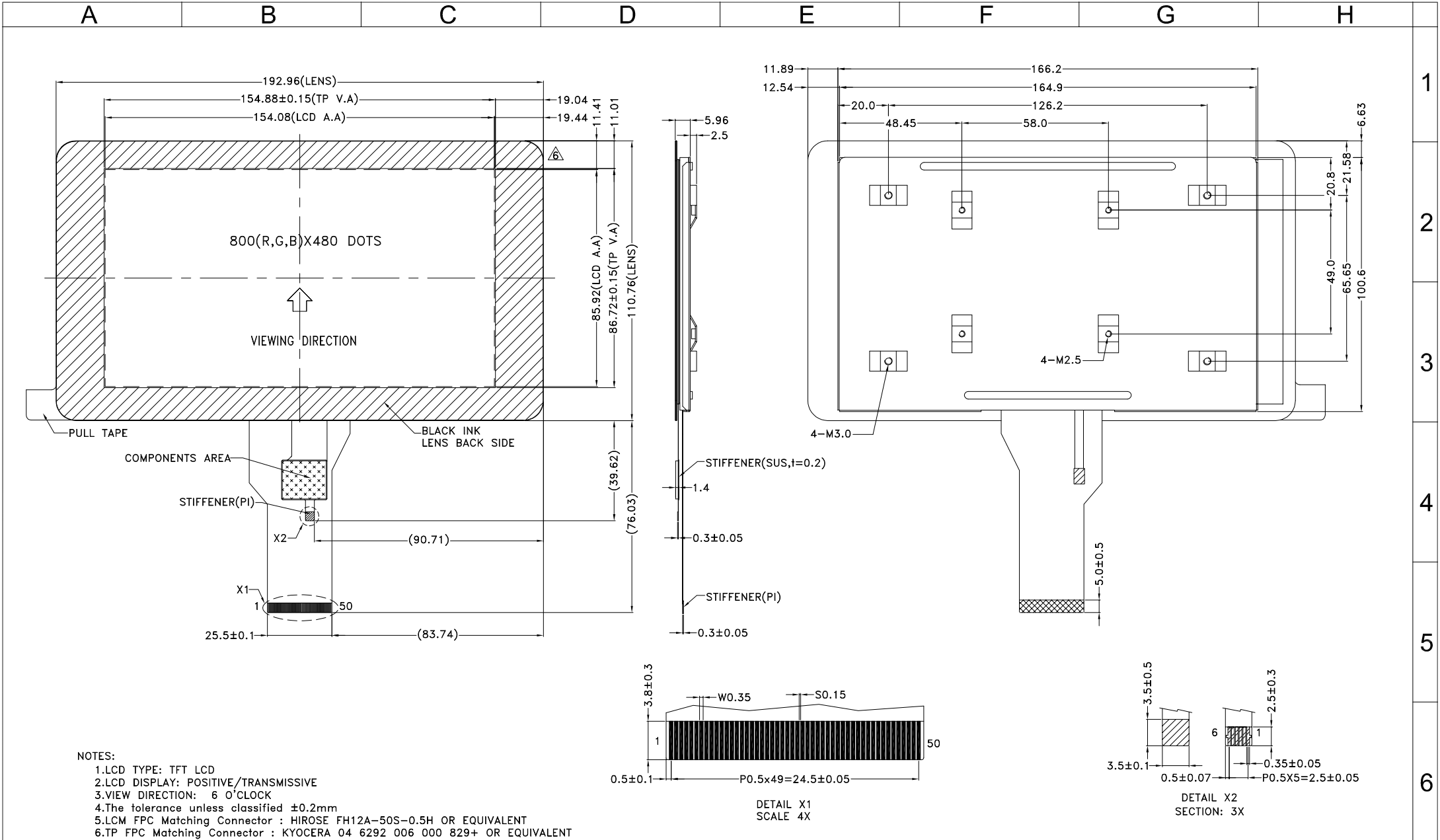
Technical Specification

- 7" Touch screen Display.
- Screen Dimensions: 194mm x 110mm x 20mm (including standoffs)
- Viewable screen size: 155mm x 86mm
- Screen Resolution 800 x 480 pixels
- 10 finger capacitive touch.
- Connects to the Raspberry Pi board using a ribbon cable connected to the DSI port.
- Adapter board is used to power the display and convert the parallel signals from the display to the serial (DSI) port on the Raspberry Pi.
- Will require the latest version of Raspbian OS to operate correctly.
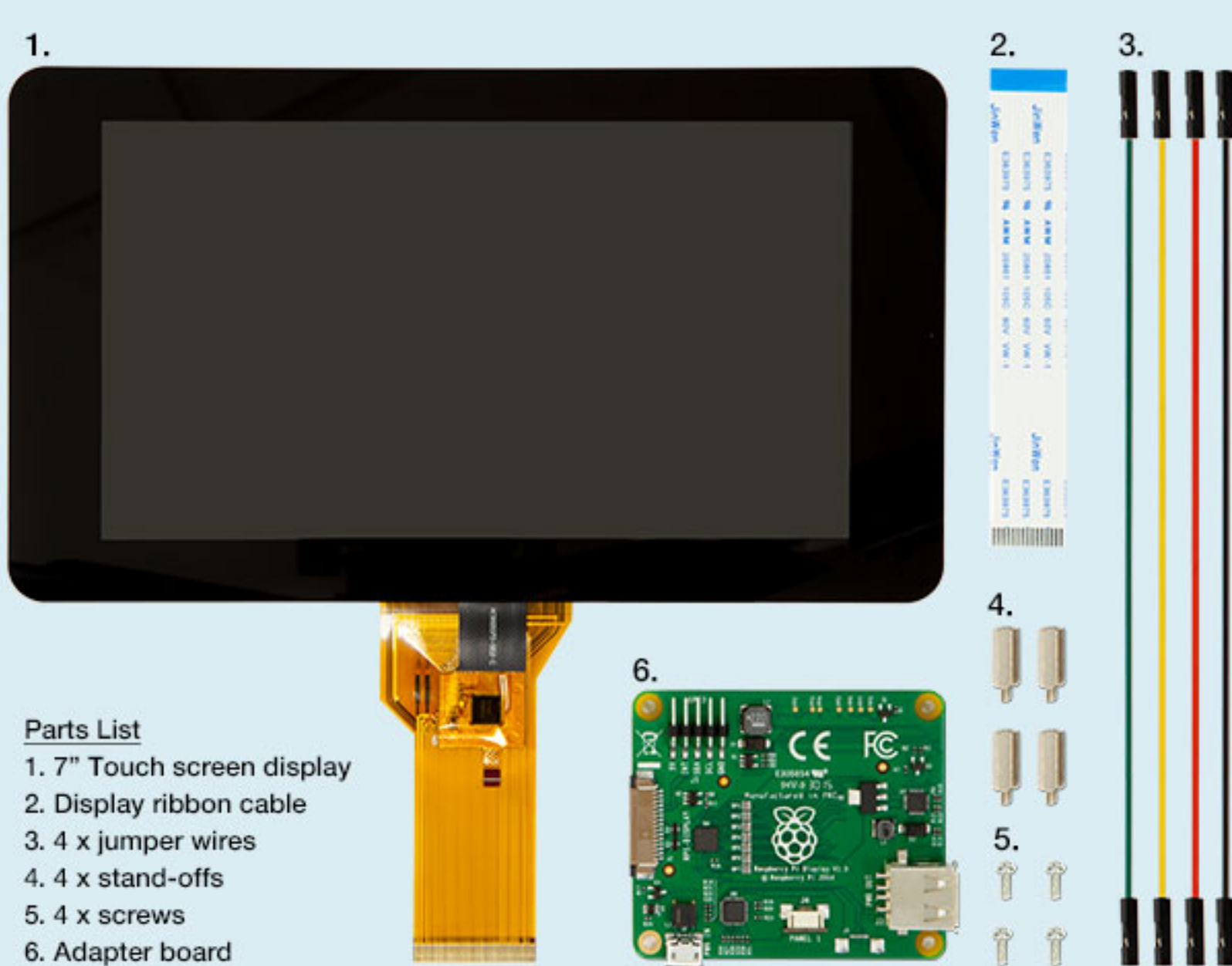
Kit Contents

- 7" Touch screen Display
- Adapter Board
- DSI Ribbon cable
- 4 x stand-offs and screws (used to mount the adapter board and Raspberry Pi board to the back of the display
- 4 x jumper wires (used to connect the power from the Adapter Board and the GPIO pins on the Pi so the 2Amp power is shared across both units)

Dimensions and labels visible on the drawing:

- 192.96(LENS)
- 154.88±0.15(TP V.A)
- 154.08(LCD A.A)
- 19.04
- 19.44
- 11.41
- 11.01
- 800(R,G,B)X480 DOTS
- VIEWING DIRECTION
- 85.92(LCD A.A)
- 86.72±0.15(TP V.A)
- 110.76(LENS)
- PULL TAPE
- BLACK INK LENS BACK SIDE
- COMPONENTS AREA
- STIFFENER(PI)
- (39.62)
- (76.03)
- X2
- (90.71)
- X1
- 1 50
- 25.5±0.1
- (83.74)

Side view:
- 5.96
- 2.5
- STIFFENER(SUS,t=0.2)
- 1.4
- 0.3±0.05
- STIFFENER(PI)
- 0.3±0.05

Rear view:
- 11.89
- 12.54
- 166.2
- 164.9
- 126.2
- 20.0
- 48.45
- 58.0
- 6.63
- 21.58
- 20.8
- 49.0
- 65.65
- 100.6
- 4-M2.5
- 4-M3.0
- 5.0±0.5

DETAIL X1 SCALE 4X:
- 3.8±0.3
- W0.35
- S0.15
- 1 50
- 0.5±0.1
- P0.5x49=24.5±0.05

DETAIL X2 SECTION: 3X:
- 3.5±0.5
- 2.5±0.3
- 6 1
- 3.5±0.1
- 0.5±0.07
- 0.35±0.05
- P0.5X5=2.5±0.05

NOTES:
1. LCD TYPE: TFT LCD
2. LCD DISPLAY: POSITIVE/TRANSMISSIVE
3. VIEW DIRECTION: 6 O'CLOCK
4. The tolerance unless classified ±0.2mm
5. LCM FPC Matching Connector : HIROSE FH12A-50S-0.5H OR EQUIVALENT
6. TP FPC Matching Connector : KYOCERA 04 6292 006 000 829+ OR EQUIVALENT
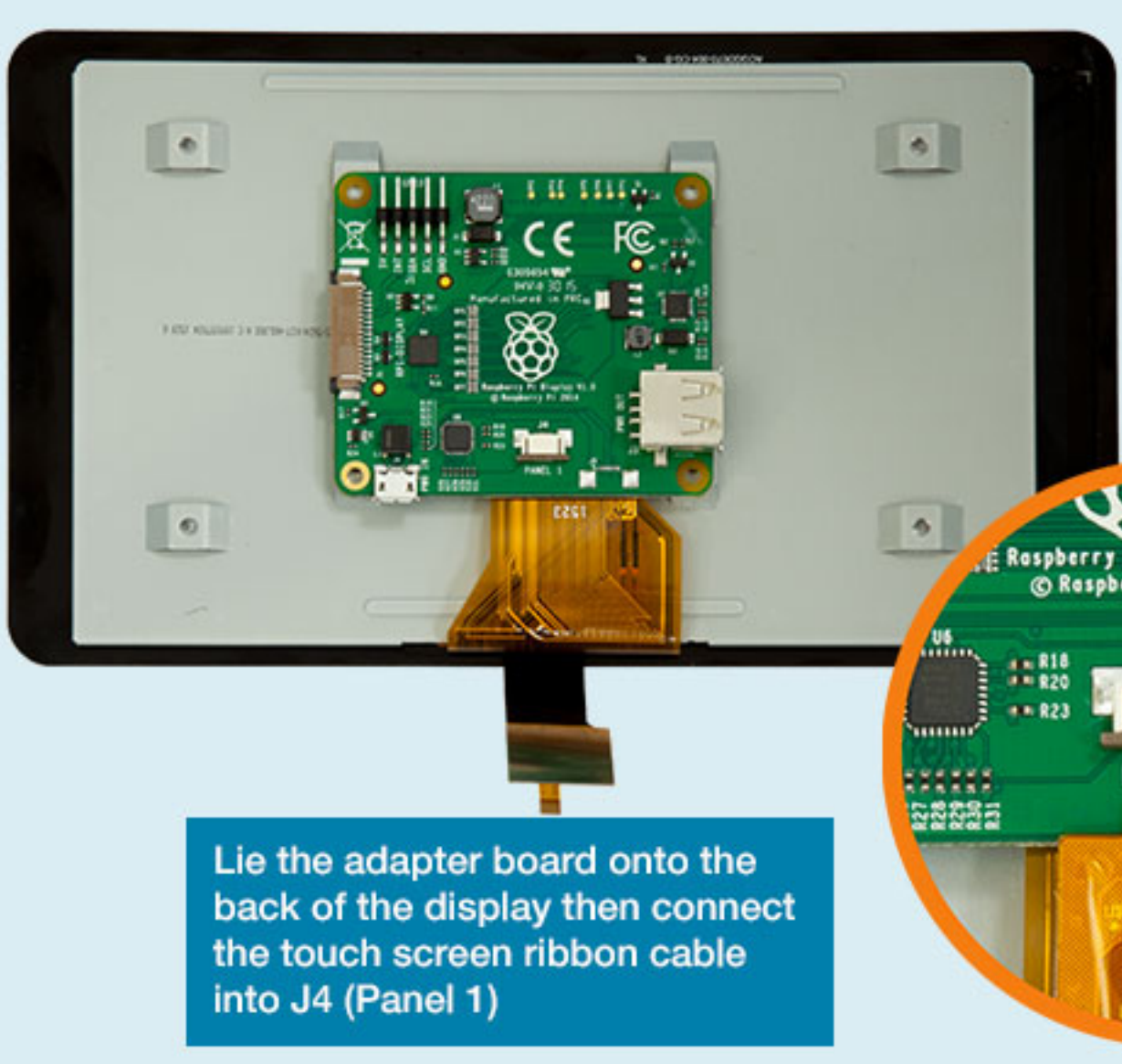
REV	REV BY	REVISER	DATE
007			
006	Cancel Logo	Stone	2014/06/27
005	Modify Frame Design	Stone	2014/04/29
004	Modify Coverlens Dimension & Logo	Stone	2014/04/03
003	Modify FPC Position	Stone	2013/12/23
002	Add Frame & Modify FPC Position	Stone	2013/12/03
001	NEW DRAWING	Sally	2013/08/26

PART NO:

DRAWING NAME :

TITLE: LCD MODULE DRAWING

			(3)	Surface	
Design	Stone				
Check	Sam	Unit	MM	Material	
		Scale	1:1	Thickness	
Approve	Oliver	Page	1/1	Quantity	

Length(Min) (mm) Tolerance / Precision	Precision Level
1 ~ 4	-
4 ~ 16	-
16 ~ 63	-
63 ~ 250	-
250 ~ 1000	-

PT-A-054-01

1.
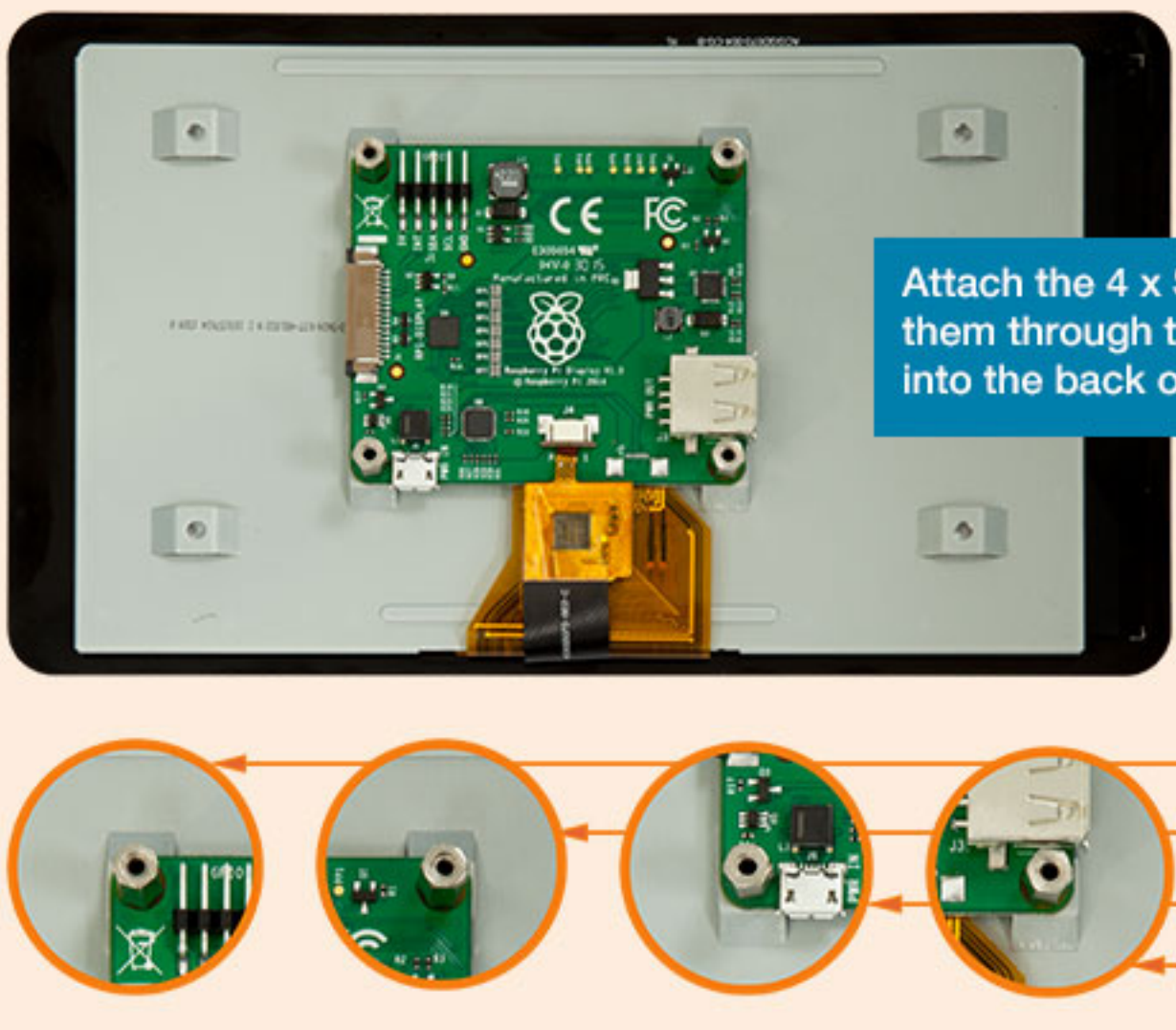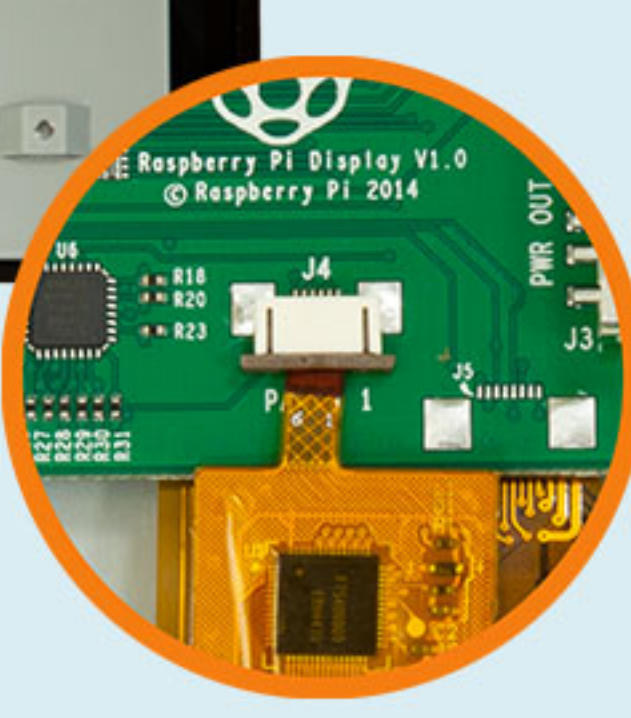
Parts List
1. 7" Touch screen display
2. Display ribbon cable
3. 4 x jumper wires
4. 4 x stand-offs
5. 4 x screws
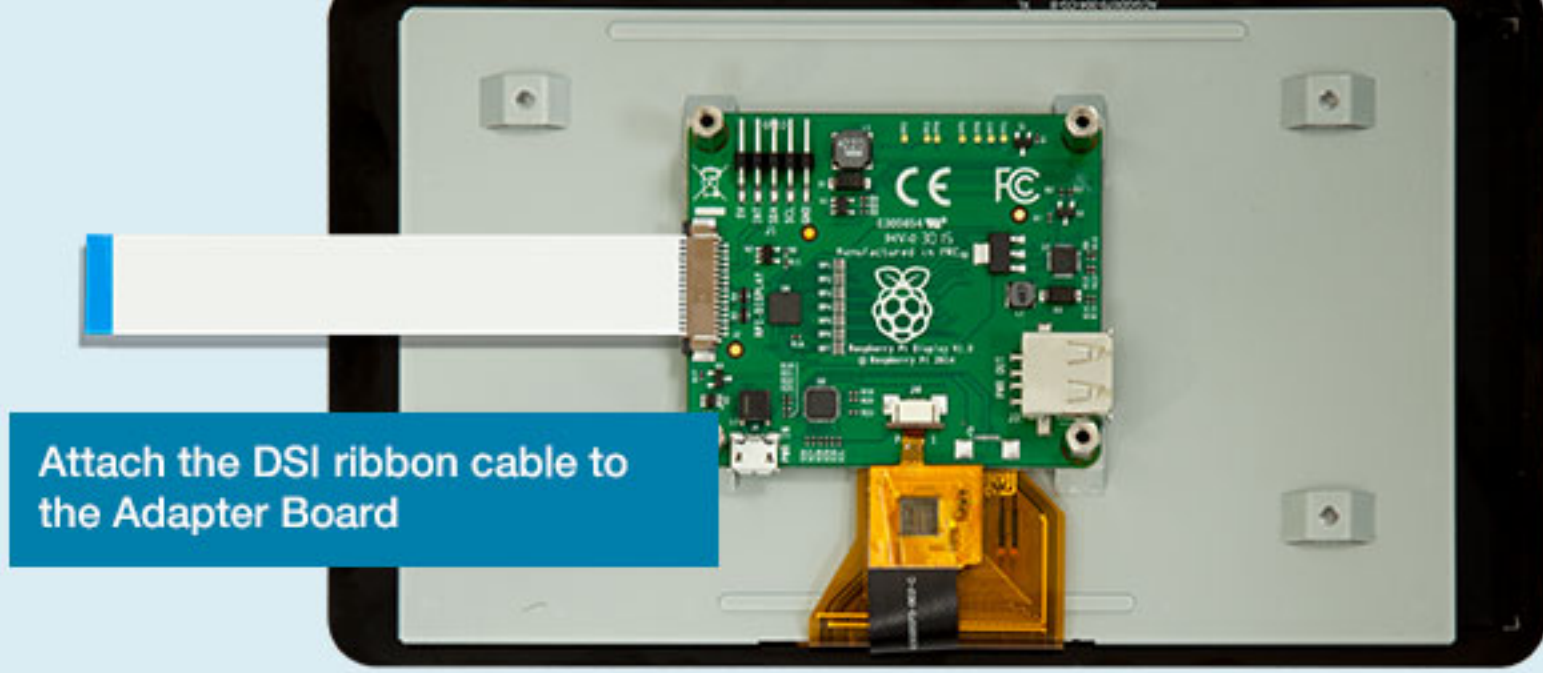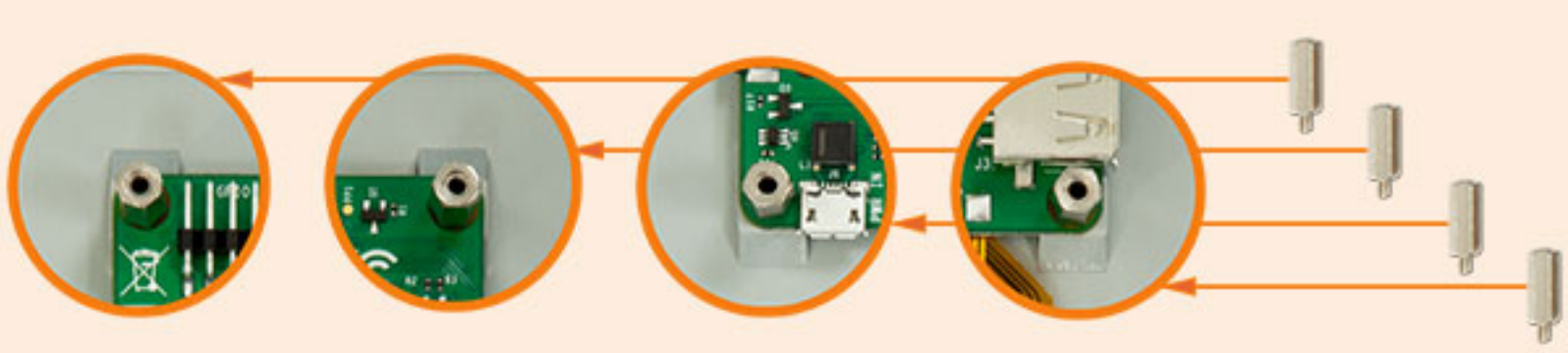6. Adapter board

2.

3.

4.

5.

6.

Connect the display ribbon cable to the back of the adapter board (Panel 2)

Lie the adapter board onto the back of the display then connect the touch screen ribbon cable into J4 (Panel 1)

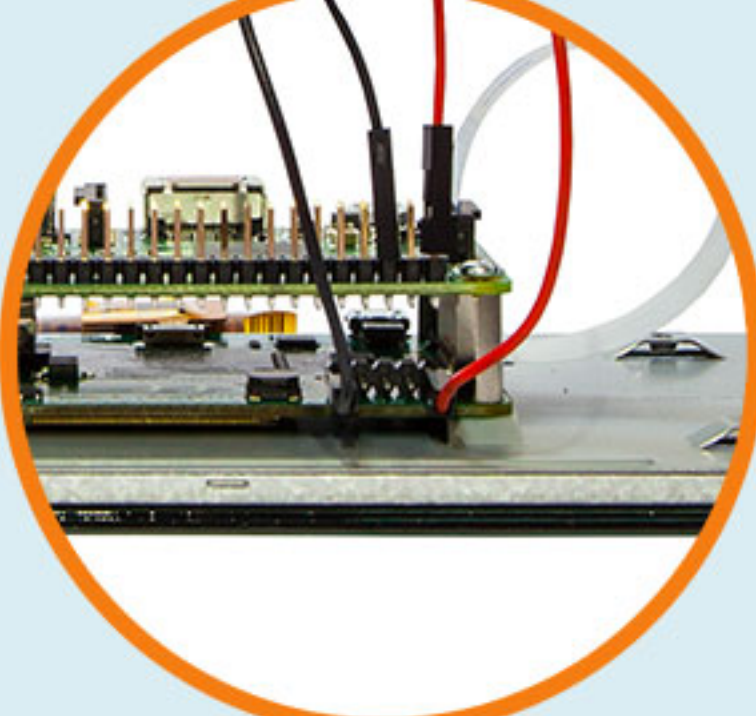Raspberry Pi Display V1.0
© Raspberry Pi 2014

Attach the 4 x Standoffs & screw them through the adapter board into the back of the display
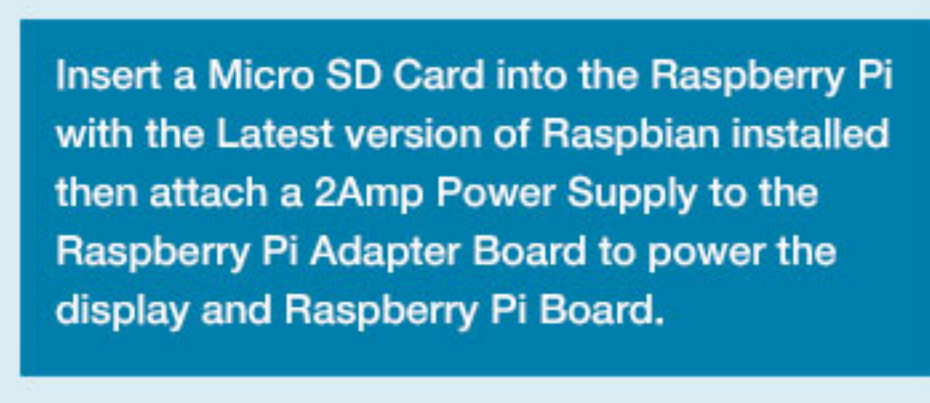
Attach the DSI ribbon cable to the Adapter Board

Use the 4 x screws to secure the Raspberry Pi board to the Standoffs then connect the DSI ribbon cable to the Raspberry Pi

Connect the jumper wires from the Raspberry Pi to the adapter board

Insert a Micro SD Card into the Raspberry Pi with the Latest version of Raspbian installed then attach a 2Amp Power Supply to the Raspberry Pi Adapter Board to power the display and Raspberry Pi Board.

Operating Software:
Now that you've assembled your Raspberry Pi Touchscreen Display, you will need to download and install the latest version of the Raspbian Operating System - available to download from the Raspberry Pi Foundation at: https://www.raspberrypi.org/downloads/

Once installed, type
    sudo apt-get update
and
    sudo apt-get upgrade

(in that order) to install all of the latest drivers and software to support the Touchscreen Display.