



# PIFACE™ PIRACK REGULATORY COMPLIANCE AND SAFETY INFORMATION

Product Name: PiFace™ PiRack

## Connecting Raspberry Pi to the World

Expand Raspberry Pi's interfacing capabilities with PiFace™ PiRack, and connect even more to the Raspberry Pi's expansion header.

### Tech Specs:

- Connect up to 4 accessory boards to the Raspberry Pi
- 5V barrel jack for additional power
- Jumpers to select between internal and external power
- Daisy chain multiple PiRacks for even more expansion
- Re-address SPI accessory boards with jumpers to swap SPI chip enable lines

For inspiration on what to build, or to upload videos of your latest projects visit the PiFace™ website:

<http://piface.openlx.org.uk>, or join the discussion on the element14 community:

<http://www.element14.com/raspberrypi>

## IMPORTANT: PLEASE RETAIN THIS INFORMATION FOR FUTURE REFERENCE

### WARNINGS

- Ensure all accessories are suitable to be connected together in parallel. If in doubt check with accessory manufacturer.
- If accessories are powered from the same power supply as the Raspberry Pi, ensure the power supply shall be capable of delivering sufficient current for the Raspberry Pi and all attached accessories. If accessories require more current than can be supplied, then connect an additional, suitable power supply to the barrel jack on the PiFace™ PiRack and place jumpers to select 'external' power.
- Ensure power supply used with barrel jack is correct voltage and polarity (5V, positive centre).
- Any external power supply used with the Raspberry Pi shall comply with relevant regulations and standards applicable in the region of intended use.
- PiFace™ PiRack is only designed for applications where maximum pin to pin voltage does not exceed 20V.
- This product should remain connected to the Raspberry Pi when in use and should not be contacted by conductive items other than the intended connections.
- Do not connect or disconnect PiFace™ PiRack from the Raspberry Pi or accessories while connected to a power supply.
- PiFace™ PiRack is shock and moisture sensitive, handle with care and do not expose to moisture.
- All peripherals used with the PiFace™ PiRack should comply with relevant standards for the region of use and be marked accordingly to ensure that safety and performance requirements are met. These articles include but are not limited to keyboards, monitors, and mice used in conjunction with the Raspberry Pi or PiFace™ PiRack.
- Children should be supervised when using the PiFace™ PiRack.
- Take care when handling to avoid mechanical or electrical damage to the printed circuit board.

## COMPLIANCE INFORMATION

The PiFace™ PiRack complies with the relevant provisions of the RoHS Directive for the European Union.

### WEEE DIRECTIVE STATEMENT FOR THE EUROPEAN UNION

- In common with all Electronic and Electrical products the PiFace™ PiRack should not be disposed of in household waste. Alternative arrangements may apply in other jurisdictions.

## BOARD LAYOUT

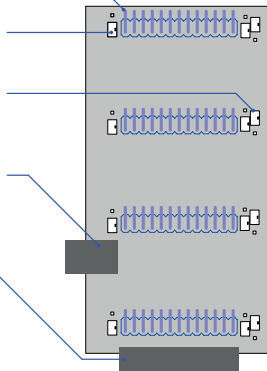
26 way header pins to connect to Raspberry Pi GPIO accessory boards

Jumpers to select accessory's power from Raspberry Pi or barrel jack

Jumpers to swap SPI CE lines

External power barrel jack

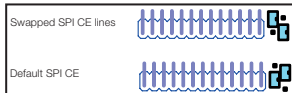
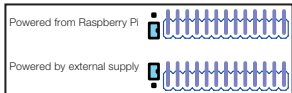
26 way socket to connect to Raspberry Pi GPIO port



## JUMPER SETTINGS

Each accessory connector on PiFace™ PiRack has two sets of jumpers. One set labelled (JP9, JP10, JP11 or JP12) selects if the accessory is powered from the Raspberry Pi or from the barrel jack. The other sets of two (JP1 & JP2, JP3 & JP4, JP5 & JP6 or JP7 & JP8) select if the SPI CE lines should be swapped. If you swap CE lines for an accessory, you must change both CE jumpers from their default position.

- If the Raspberry Pi cannot supply enough current to an accessory, place the corresponding jumper in the 'Ext' position.
- In most situations the SPI CE lines do not need swapping and the jumpers should be connected in the position without a line printed on the silkscreen. To swap CE lines (GPIO pin 24 and GPIO pin 26) place the corresponding pair of jumpers in the position indicated by a line on the silkscreen.



[www.element14.com/legislation](http://www.element14.com/legislation)

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