

# IACS® 1CH 3A Switching Board (CMOS / TTL / Logic Level Switch Board, Single Channel) Information / Instructions / Datasheet

Last Updated: September 2018

## Versions & Variations



Figure 1

### Need more than 10A?

**IACS Designs and manufactures a lot of different relay boards. We have 25A and 80A models as well as SSR and Miniature**

## Specification & Features

- Switch rating of 3 Amperes at domestic voltage (240-250v AC) or 3A at 30V DC. (Take care when working with potentially hazardous voltages)
- Compact but still properly labelled and with proper connectors all round! **NO SOLDERING REQUIRED!**
- Works directly at the logic level from a parallel port, AVR, Arduino, and many other microcontrollers and interfaces that use 'TTL' or CMOS logic levels, low level current will not damage or overload signal pins.
- May be driven using a microcontroller running at 3v directly. May go as high as 12v on the logic input. Recommended maximum is 8v.
- Available in a range of different supply voltages.
- CE Mark, RoHS and WEEE compliant, manufactured in England.
- Dual-plated tracks conduct more current and make the device more reliable, the quality coating on the board makes it more resistant to residual moisture (not visible moisture) and corrosion.
- Customisations can be made to order (contact us to discuss what you need or to order additional accessories). These boards are often sold with the option to have the onboard LED installed or removed or different size / colour, and the relays screw terminals installed or removed. We can usually install a different LED at no extra charge, we recommend that you do not have the onboard LED fitted if you are using a more current-demanding external LED.

Supply Voltage	Part Number	Availability	Intended Use	Power Usage	Dimensions (mm)
3V	1CH-3A-3V	Short Lead Time	General (NO / COM / NC)	Off State <= 1mA, On State <60mA	20 x 50 x 18
5V	1CH-3A-5V	Short Lead Time	General (NO / COM / NC)	Off State <= 1mA, On State <55mA	20 x 50 x 18
9V	1CH-3A-9V	Short Lead Time	General (NO / COM / NC)	Off State <= 1mA, On State <50mA	20 x 50 x 18
12V	1CH-3A-12V	Short Lead Time	General (NO / COM / NC)	Off State <= 1mA, On State <45mA	20 x 50 x 18
24V	1CH-3A-24V	Short Lead Time	General (NO / COM / NC)	Off State <= 1mA, On State <40mA	20 x 50 x 18

\* All versions of this product are tested before shipping but relay / connectors / LED colour / size may vary per batch listing.

## Simple Connection Guide

- +VCC is for connection to the positive side of your power supply such as a DC adapter or battery.
- GND / CG is for connection to the negative side of the power supply or battery but ALSO connect the 'ground' side of your logic source to this pole. (It is safe to do so, but check that your wiring is correct before switching your DC supply or Logic source on.)
- TTL / CMOS / LOGIC / CH1 / CH# is for connection to your logic output such as a parallel port pin, microcontroller, converter, or shifter, or a 'pin out'.
- If you intend to mount the board ensure that you do not over-tighten the screws, we recommend that you use nylon or polypropylene / HDPE **M2** screws and fasten the board to mounting posts as this causes less damage to the surface of the board. Steel (Zinc / Nickel plated) screws are also a good choice of screw, but we suggest you use washers where possible.

**You REQUIRE the positive, GND and TTL all connected for the board to function properly.  
(Remember to link the negative side of your logic output to the GND terminal otherwise nothing will happen)**

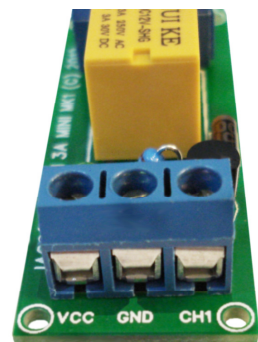


Figure 2

