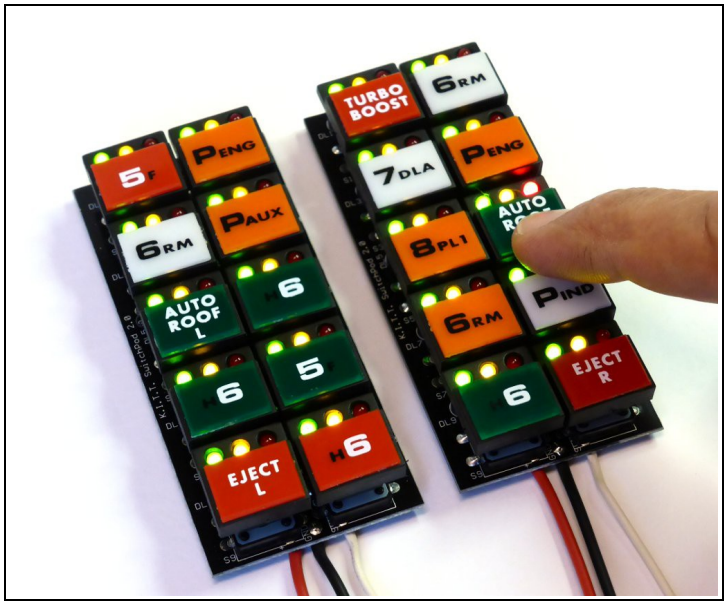
Switchpods season 1/2

Instructions sheet updated on: March 13th 2020



Thank you!

Thanks for purchasing ideegeniali's switchpods. Please follow these instructions to get the best out of your products. No matter if you just want to plug in power supply only, and get immediate results, or want full control over wiring, to get exactly the functionality you desire in conjunction with other hardware. Ideegeniali's switchpod will match your requirements, because are very versatile and allow for both beginners and advanced wirings, depending on your skills or goals.
Nobody gets disappointed by ideegeniali's switchpods.

Further info

To order products, please visit our online shop
http://www.ideegeniali.it/kitt
or our network of resellers:
http://www.knightriderworld.com/
https://knightindustriesofkentucky.com/

For further info, please use contact module and provide your email address to get a reply:
http://www.ideegeniali.it/contact

Or write an email us directly
paolo@ideegeniali.it

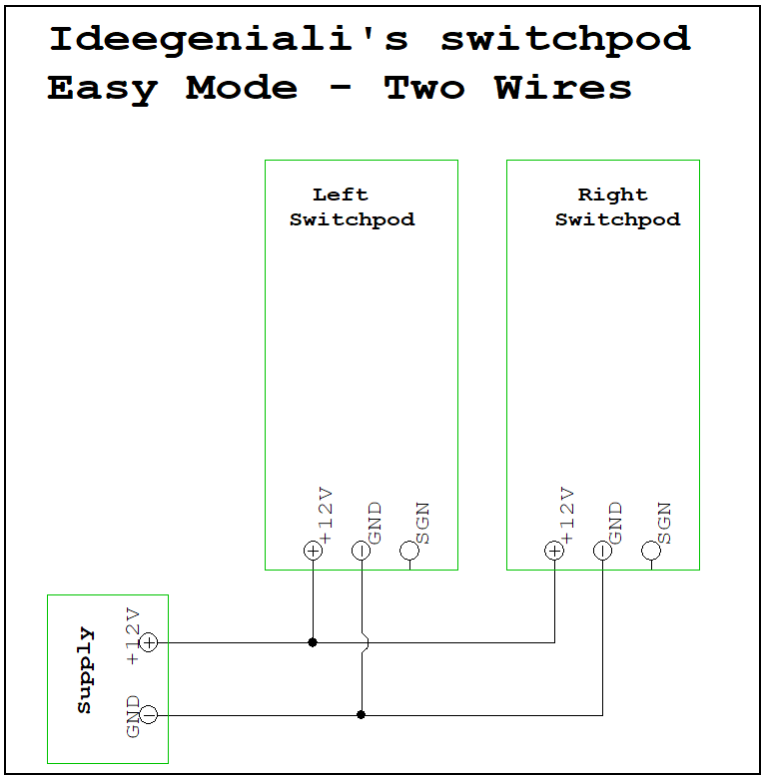
We're here to help you!

ideegeniali.it

Easy Mode – Two Wires

Connect just +12V and GND power supply.
We highly recommend using red wire for +12V (positive supply) and black wire for GND.
With just power supply connected, switchpods behaviour is this: green led and yellow led are always lit. Red led lights up on keypress. Exactly as in the TV-Show.

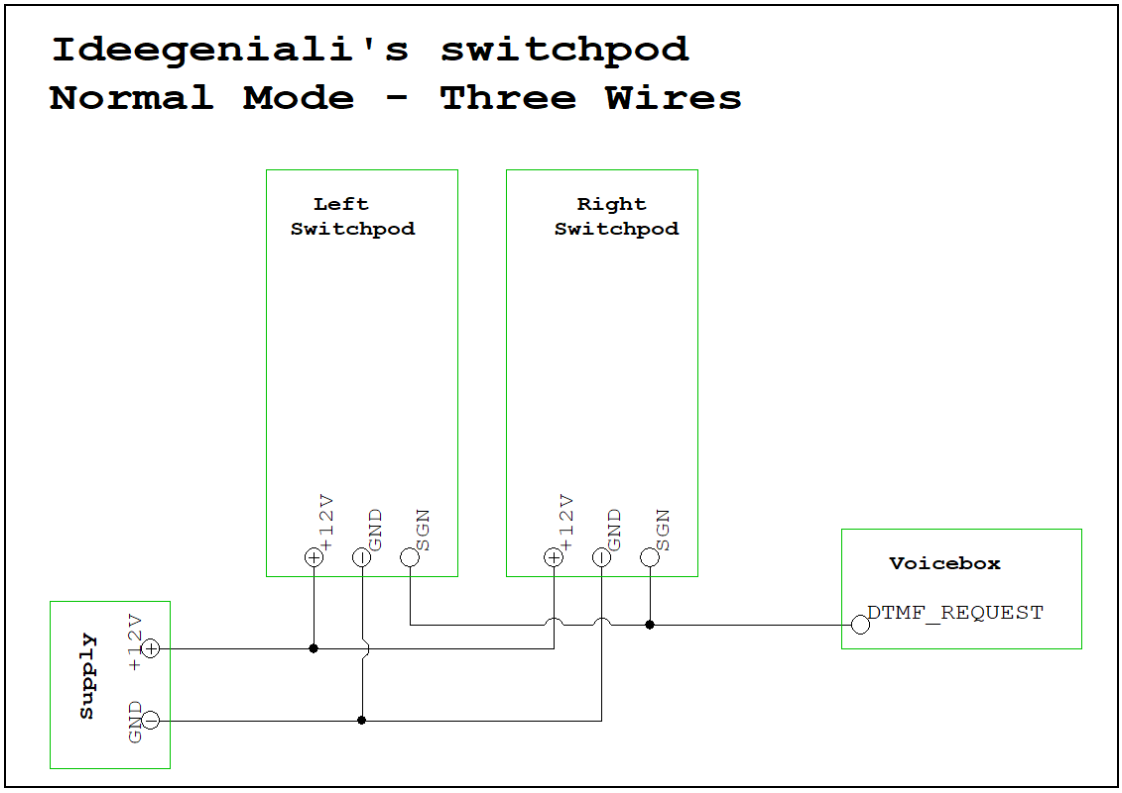
Video demonstration here:
https://www.youtube.com/watch?v=JfIdNkFSrtI



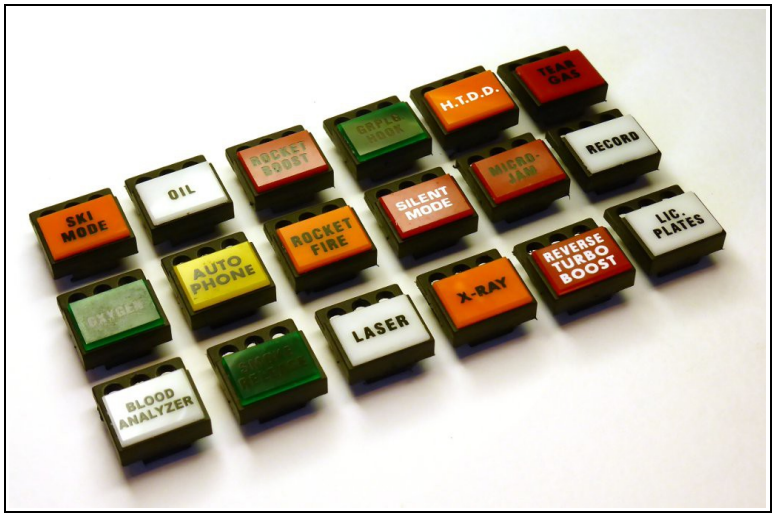
Normal mode – Three wires

Connect power supply as in EASY MODE.
Connect also SGN from switchpod into DTMF_REQUEST on ideegeniali's voicebox (sold separately).
We suggest to use any wire color of your choice, avoiding red and black, which are usually the colors to be reserved for power supply. In picture/video we used white.
With this extra wire connected, any keypress will also have voicebox emit a random dtmf sound.
You can connect both left and right switchpod SGN signals, both into single DTMF_REQUEST screw terminal of voicebox.
All the 20 keys (10 on left pod, 10 on right pod) will emit a random DTMF tone

Video demonstration here:
https://www.youtube.com/watch?v=JfIdNkFSrtI&t=0m20s

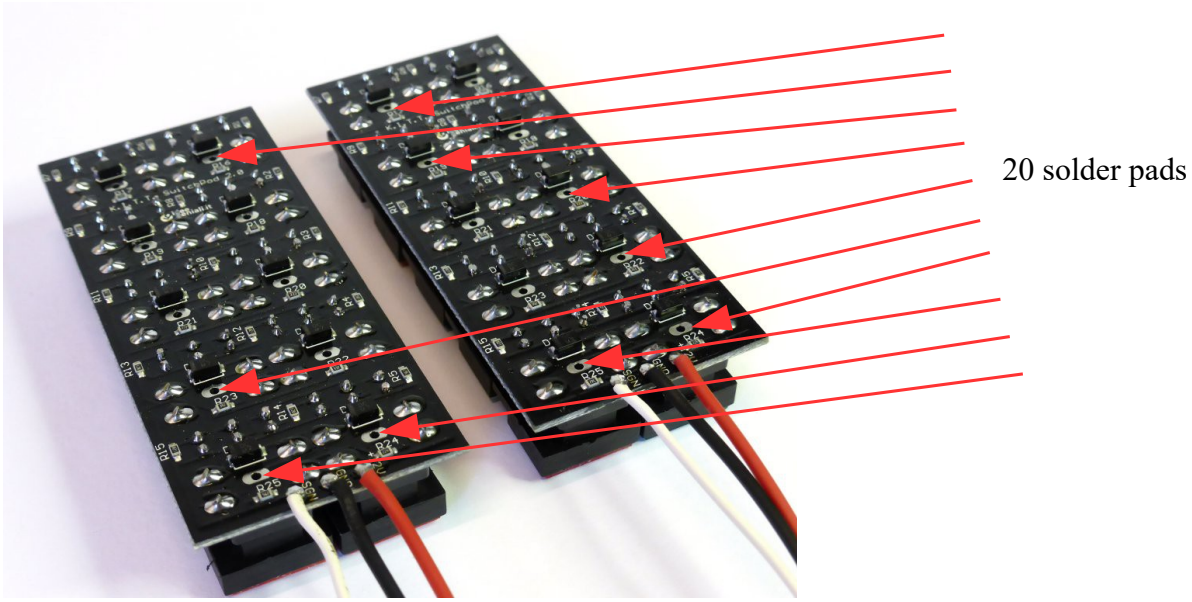


Mix those keys!



Are you bored of standard keys arrangement? With extra keys set (sold separately or in bundle), you can mix and customize your switchpod to your likings. We included a set of lettering from season 1 and season 2 episodes, so you can match any episode, or be creative, and invent your unique combination. Keys have world's first ideegeniali's original press-fit design, for the easiest replacement. As math tells us, there are 816919851146254429077504000000 possible permutations. That means that with extra keys, your switchpod will be unique, and nobody else will have same keys arrangement as yours!
Video demonstration here:
https://www.youtube.com/watch?v=JfIdNkFSrtI&t=1m47s

Advanced use #1 – Up to 20 more wires

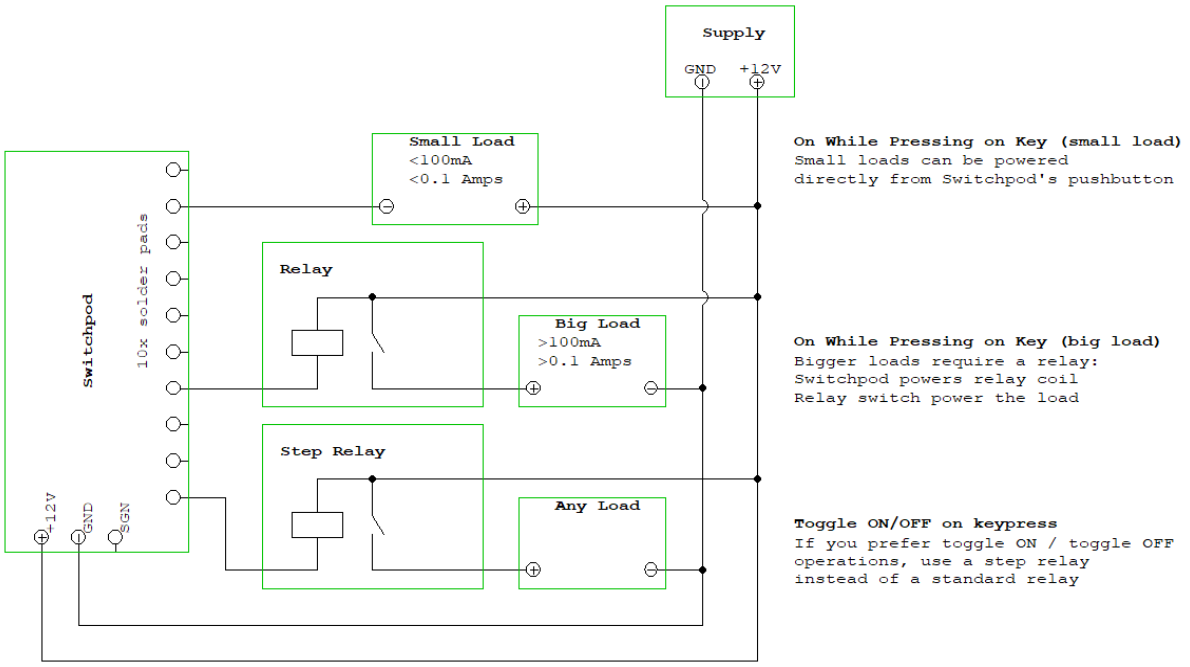


If you know how to hook up simple circuits and use soldering iron, you can tinker/hack on the switchpods yourself. We provided explicit points of connections for hackers out there. There are in fact 10 solder pads on the back of each switchpod. You can attach up to 10 more wires to these soldering pads on each switchpod, that is 20 more wires for both switchpods.
These wires will be connected to GND (via an internal diode), while pressing on the button.
You can use this feature to:

- power directly a small external load (e.g. a led) load on while pressing on button
- power a bigger external load, by using an external relay:
  switchpod tact switch powers relay's coil, relay's switch powers the external load
  load on while pressing on button
- use a step relay instead of a standard relay : button will toggle load ON and OFF
- trigger a digital input on external electronic device
  e.g. there are some customers that attached these pads to a MP3 player board,
  so that you get a different MP3 playback for each of the 20 keys.

Please contact us on email paolo@ideegeniali.it if you want more assistance on this.

Connecting loads to ideegeniali's Switchpod solder pads

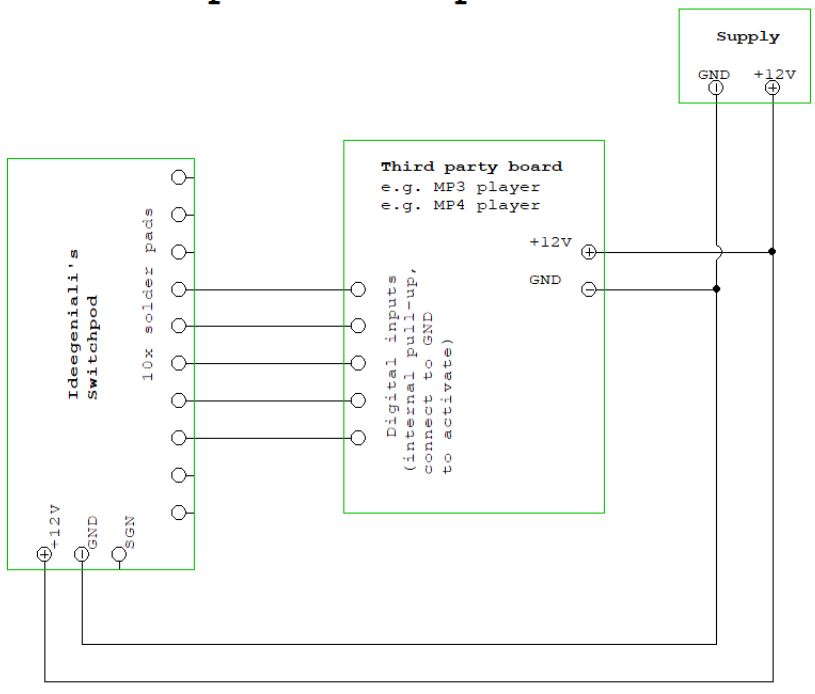


On While Pressing on Key (small load)
Small loads can be powered directly from Switchpod's pushbutton

On While Pressing on Key (big load)
Bigger loads require a relay:
Switchpod powers relay coil
Relay switch power the load

Toggle ON/OFF on keypress
If you prefer toggle ON / toggle OFF operations, use a step relay instead of a standard relay

Connecting third party electronic boards with digital inputs to Switchpod solder pads



Advanced use #2 – Reading SGN

If you can program arduino, raspberry pi, or other microcontrollers or embedded systems with an ADC to read a resistive keyboard, and would love to use switchpods as a resistive keyboard, we have you covered! You can read which key was pressed and distinguish between the 10 different keys, using only one wire to left pod, and one wire to right pod, into two ADCs on your embedded system. The switchpod acts in fact as a resistive keyboard, and will connect a different value resistor to GND for each of the 10 different keys, on the SGN wire. You can also use ready-made third party boards that accept resistive keyboard inputs, this way.
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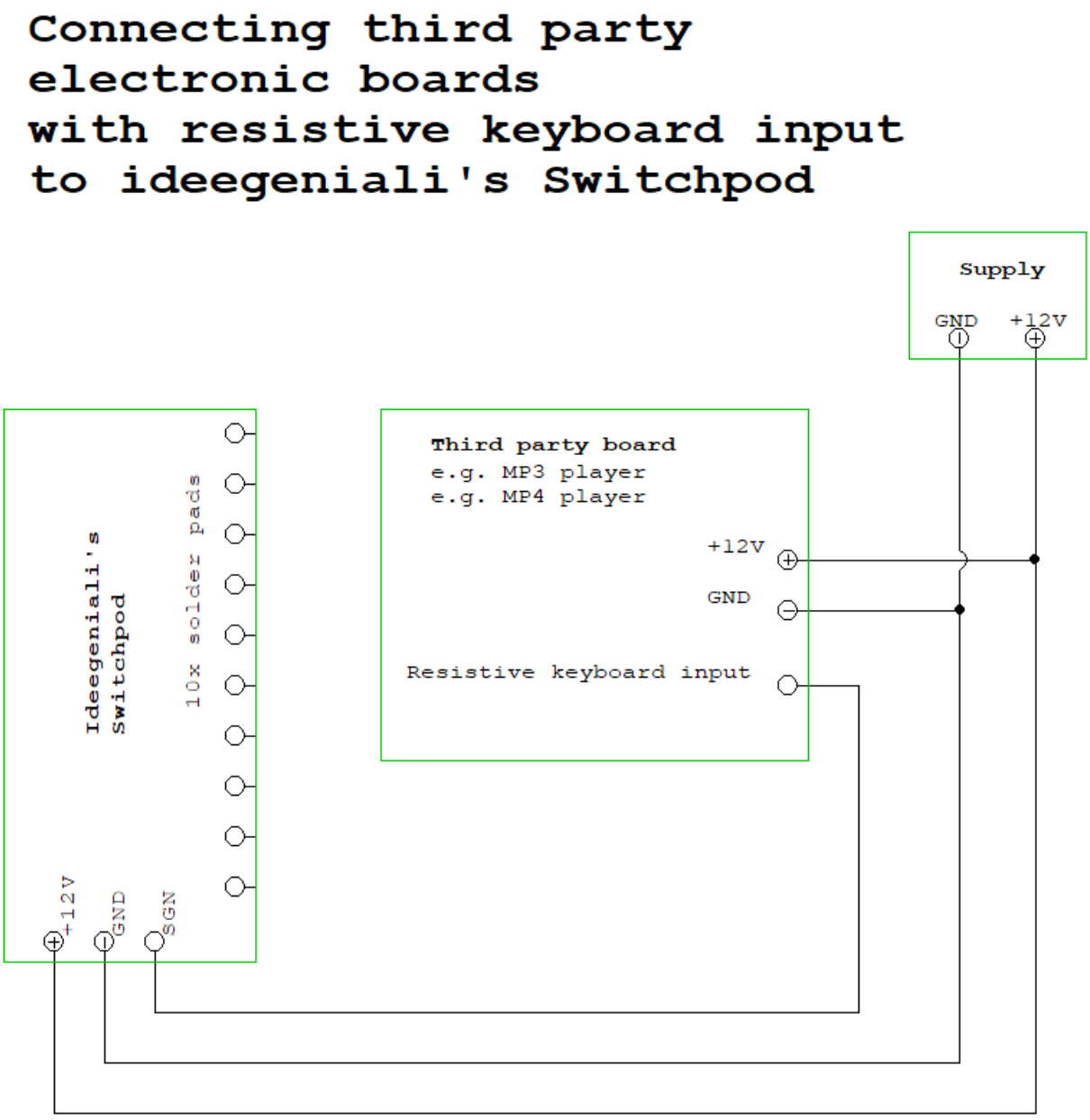

Future use – RTS4Kitt integration

Ideegeniali is working together with the guys at
http://www.roadthunderstorm.com/RTS4KITT-EN.htm
to offer an unprecedented integration between software and hardware.
Mario Ravasi's software can read which key was pressed, and act accordingly.
If one has Mario's software running on car pc, the car pc can play out a mp3 on keypresses.
Or do other stuff with Mario's software or hardware in response to ideegeniali's switchpod keypresses. Development is at the working prototype stage at time of writing (march 2020).
Please contact us on email paolo@ideegeniali.it if you want more assistance on this.