

Virtual Jeff^(R) PRO

DEEP DIVE



FOOTSWITCHES

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You need external footswitches to access the HOLD and BLEND features. They're not included with VJP as many players have their own already. If you don't, we've included instructions on how to make them. It's pretty simple to do... and won't cost much!

WHICH ONE TO BUY OR BUILD?

Choosing what kind of footswitch is important. There are two kinds of switches in footswitch boxes – and they're mechanically quite different:

- LATCHING switches turn ON when you press them, and don't turn OFF until pressed a second time
- MOMENTARY switches turn ON when pressed and OFF when released.

The difference in operation can be important when you're playing...

- If you want HOLD/BLEND turned on for a whole song, LATCHING is better
- If you only want HOLD/BLEND for a single riff, MOMENTARY is much more convenient

vSWITCH™

We invented vSWITCH™ to provide this flexibility! It provides LATCHING and MOMENTARY operation from ordinary momentary switches. How does that work? vSWITCH™ is built into the stompbox firmware so momentary footswitches will automatically do this:-

Tapping a switch will turn the feature ON. Tapping again will turn it OFF (latching mode)

Press and hold a switch to turn a feature ON, release it to turn it OFF (momentary mode)

TYPES OF MOMENTARY SWITCHES

Momentary switches come in two types: NORMALLY OPEN (NO) and NORMALLY CLOSED (NC). When they aren't being pressed, NO switches are normally 'open' (no connection) and NC switches are normally 'closed' (connection is made). VJP will check at power up and automatically configure for NO or NC switches. No drama!

WHERE TO PLUG IN?

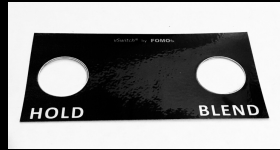
There's two footswitch inputs on the stompbox – labelled HOLD and BLEND. The two inputs are there so you can use single footswitches for each function. We find it's much more convenient to use a dual footswitch (which has two switches in one box). You can plug a dual footswitch into either input and it will control both HOLD and BLEND.

TIP: Single footswitches use a 'mono' jack plug (a.k.a. TS – tip and sleeve), Dual footswitches use a 'stereo' jack plug (a.k.a. TRS – tip, ring and sleeve).

Want to build your own? See the next page

BUILD YOUR OWN DUAL FOOTSWITCH

The box is simple to build as there are no trick electronic circuits required – just two switches and a socket. You can make a pretty good label using any word processor, printing the design on laser or inkjet then laminating it. Fancy artwork and wild colours optional.



What you need:

1. A die-cast aluminium box. A plastic box is ok, but remember you'll be slamming down with your foot so it needs to be durable. The size is optional, but a standard Hammond 1590B is about right for a dual footswitch – available from Amazon etc for \$7.00-\$9.00



2. Two momentary switches (for a dual switcher). We've found that 'security' switches are good – they're usually durable by design and available in momentary (not latching). Normally open (NO) or normally closed (NC) doesn't matter - VJP will auto-configure for either type. The switching they do is very simple, so you don't need multiple contacts or poles, so SPST (single pole, single throw) is fine. Price? \$3.00-\$5.00 each.



3. A 'stereo' 1/4" jack socket (a.k.a. TRS – tip, ring & sleeve). From \$1.50 depending on quality. As per cable (below), there's no audio going through it so it's not critical.



- 4. A short length of hookup wire (practically any decent wire will do)
- 5. A short stereo guitar cable to connect your dual footswitch to VJP

Tip: A stereo cable is only a few dollars depending on length and quality so it's hardly worth making one. Note: There's no audio going through the stereo cable so durability is more important than cable quality.

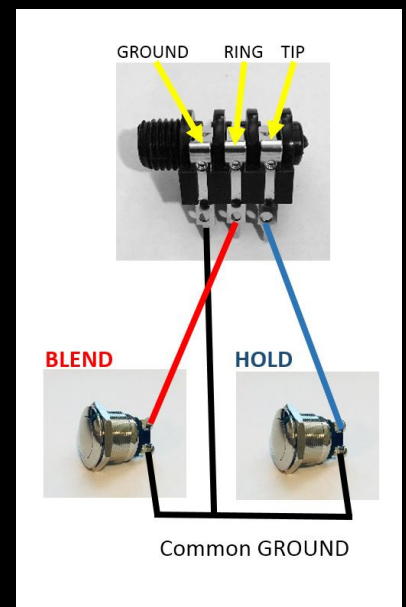
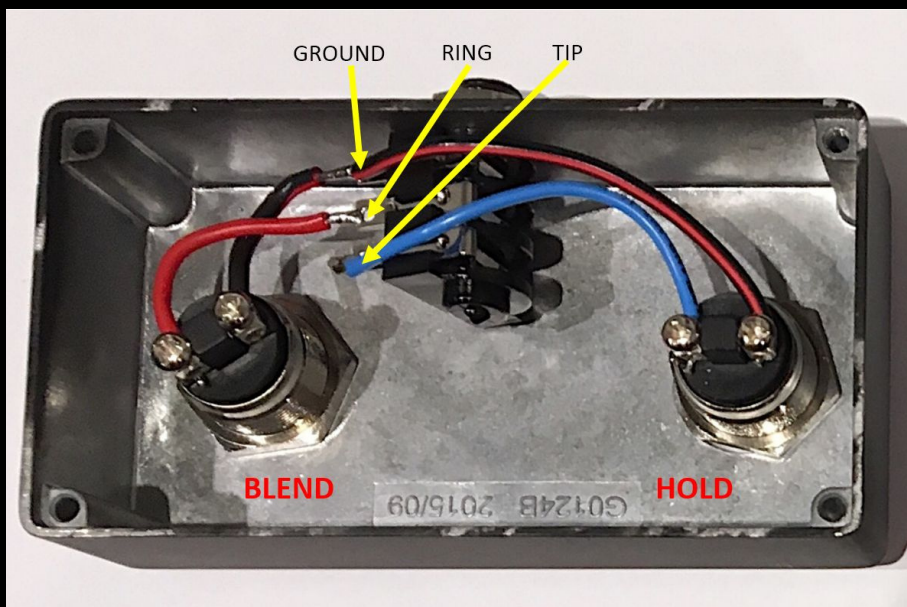
Note: A dual footswitch plugged into either input (HOLD or BLEND) will control both functions.

WIRING AND ASSEMBLY

Drill the holes for the footswitches and jack socket then glue on the label and fit the switches and socket. Connect it all together with some hookup wire – it's not critical and doesn't need to be shielded. Most security switches have screw terminals so you won't need to solder the connections. You will need to solder the three connections to the ¼" jack socket (or have a techie friend do it). All done. Have fun. Now.

Connections:

1. Common wire from GROUND of ¼" socket to one side of both switches - it doesn't matter which side
2. RING connector of ¼" socket to BLEND switch
3. TIP connector of ¼" socket to HOLD switch



Watch the companion Deep Dive video to see V-Switch in action