

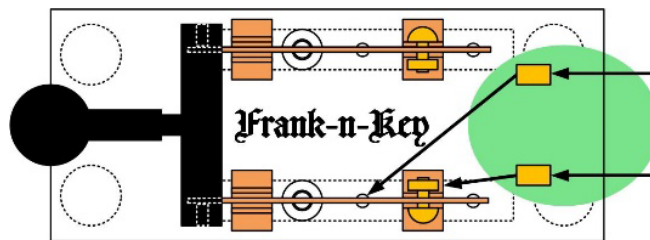
The Frank-n-Key

Restore life to dead contacts with a CW key inspired by Baron Viktor von Frankenstein

By John Portune W6NBC



Had the infamous monster-maker from Ingolstadt, Germany been a ham in 1792, perhaps this was his key? Amidst a whiff of celestial ozone, might not this “fun” CW knife-switch key yet summon the powers of electric darkness? Wonders may yet lurk in contacts from the basement laboratory-shack of your radio imagination?



Made from readily-available materials, with ordinary workshop tools – or with access to a 3D printer – here’s a fun CW key masquerading as the “monstrous” knife-switch that once set the fearsome apparatus in motion. Boris Karloff come forth!

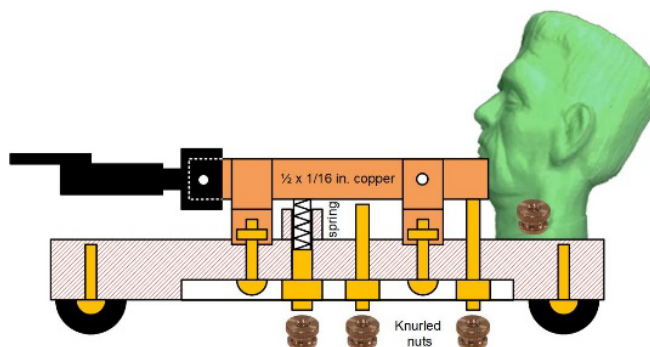


Figure 1: Pictorial of Frank-n-Key

Tools and Materials

I printed the base of the key on my 3D printer, Figure 1. It can also easily be cut and drilled from a plastic kitchen cutting board. The copper switch blades, purchased as 1/16 x 1 in. stock from onlinemetals.com and the brass screws from my local hardware store, need no more than a home-workshop bandsaw, drill press and hand taps and dies. If you lack a 3D printer, someone in your local radio club has one. STL 3D printer files are downloadable from w6nbc.com/frank-n-key. Also, various internet companies will print the files for you.

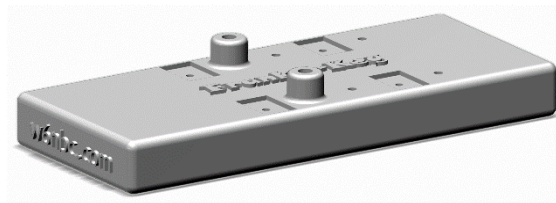


Figure 2: 3D printed key base

Bill of Materials

1	Plastic key base	3D printed or hand fabricated
1	CW paddle/switch bar	3D printed or hand fabricated
1	Frankenstein Monster head	3D printed
4	Rubber or plastic feet	amazon.com
1 ft.	½ x 1/16 in. copper stock	onlinemetals.com
1	¼ x 1 in. spring	Hardware store
3 in.	¼ in. Brass rod or long screw	Hardware store
	Brass nuts and screws	Hardware store
4	8-32 brass knurled nuts	amazon.com
3	3D printer files, head, base paddle	w6nbc.com/frank-n-key

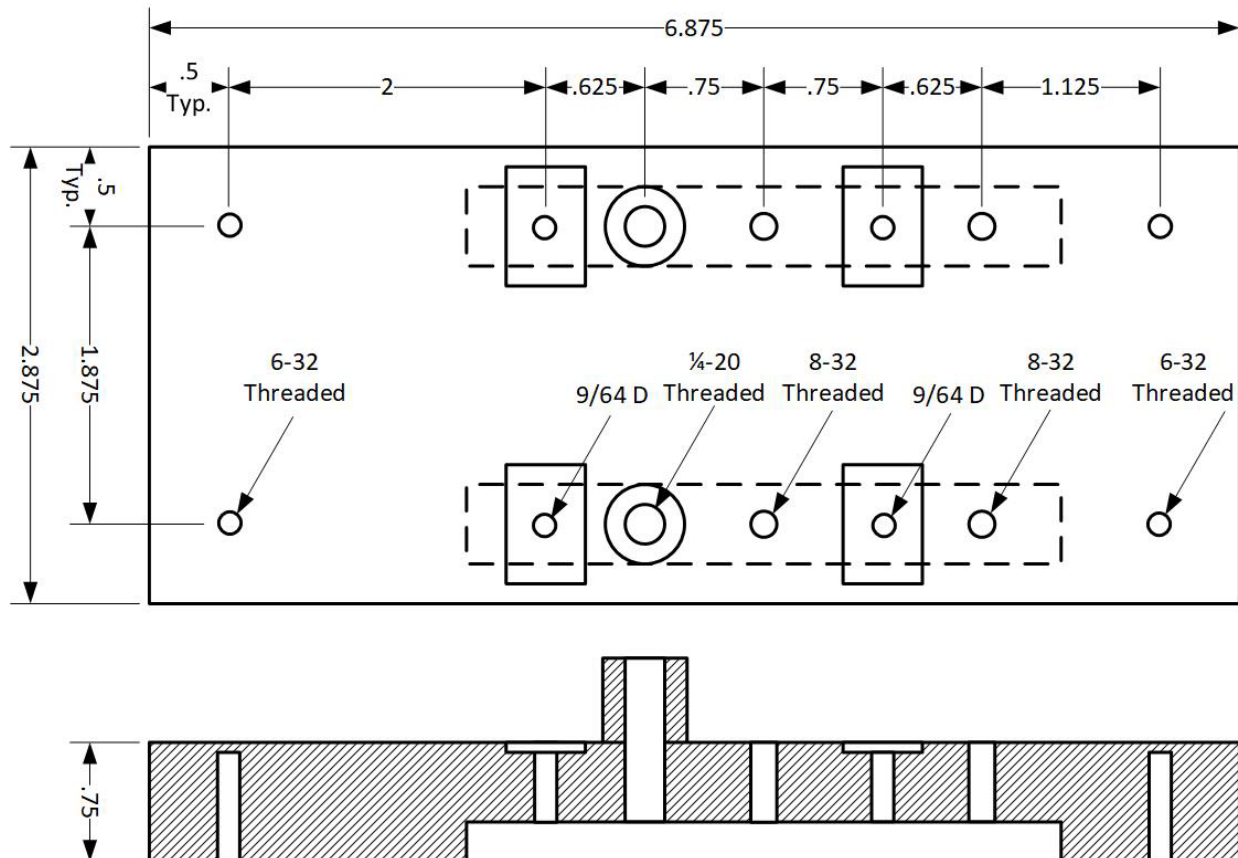


Figure 3: Dimensions of Key Base

The 3D printing pattern for the Frankenstein Monster head is by Mustangdave on Thingiverse. (nice work Dave):

<https://www.thingiverse.com/search?q=Frankenstein&dwh=255c4b3e3e7ca>

[95](#). I shortened the neck and tipped the head backwards for gluing onto the key base. I then drilled out the printed neck terminals for connection screws and classical knurled nuts. Short wires, inside the head connect the terminals through holes in the base to one of the 8-32 threaded contact rods and one of the knife switch blades. If you prefer to be more-fiendish, you can use the other set of contacts to drive red LED eye lights. I'm more conservative.

By the way, the Frankenstein Monster was not created in Transylvania, Romania. Dracula came from Transylvania. The Frankenstein monster was stitched together in Ingolstadt, Germany, in the center of Bavaria in southern Germany. The school of medicine that existed in Ingolstadt in 1791 provided the ideal backdrop for Mary Shelly's classic horror novel.

On a dark and stormy night, with clouds scudding across the moon, if you make contact using this key from someone with a DK callsign soliciting spare parts, I suggest you QSY.