

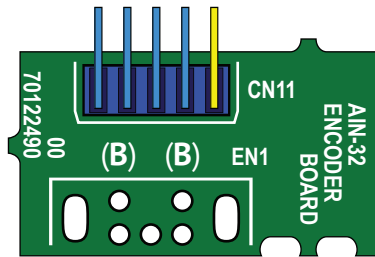
ROLAND S-760 ROTARY ENCODER REPLACEMENT

Although it's not exactly a **"Drop-In"** solution, this rotary encoder replacement works extremely well. It requires a little bit of soldering manipulation on the AIN-32 Encoder Board but it does the job. The reason this isn't a **"Drop-In"** replacement is because I'm unable to find any encoders with a 30mm shaft like the original. The longest one available in this Bourns encoder series is 25mm. Also, the pin arrangement is different from the original ALPS brand which was most likely custom made for Roland

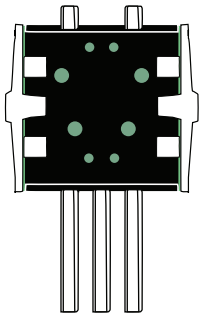
Only 3 of the replacement encoder pins will fit exactly onto the encoder board so carefully flatten out the set of 3 pins until they match the orientation of the original encoder. Place it in the same position as the old encoder then solder these 3 pins directly onto the encoder board using the same three holes (A). Take the remaining two pins (*these are for the button switch*) and use some leftover LED leads or other stiff wire and solder them to the two empty holes just above the three pins (B). The remaining two large holes were originally used to attach the encoder case to the board for stability and also for grounding. Cut a strong paper-clip into 2 sections, sand off some of the outer chrome and solder these two outer case shield connectors in place (C). This will strengthen the encoder in place on AIN-32 Encoder Board just like the original part

Use a very small bolt 4mm x 7mm (*or other small piece of metal*) to act as a spacer between the knob and the shaft. Don't use a screw with a sharp point because both ends need to be flat. This extra metal spacer ensures that the knob sticks out far enough from the faceplate as before. Remember, this knob is pressed over and over again so be sure to use a **metal** spacer. A dab of silicone adhesive is recommended, especially if the original knob was loose to begin with

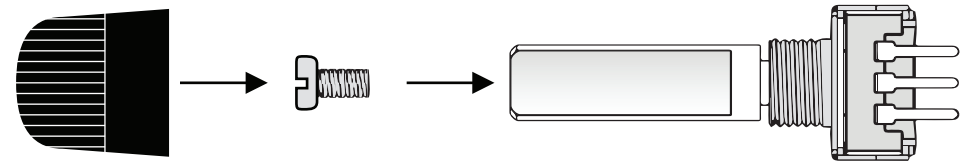
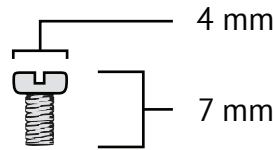
My usual DIY spiel: Use eye protection when soldering! That stuff flies everywhere!! Make sure you are grounded against ESD when opening the S-760



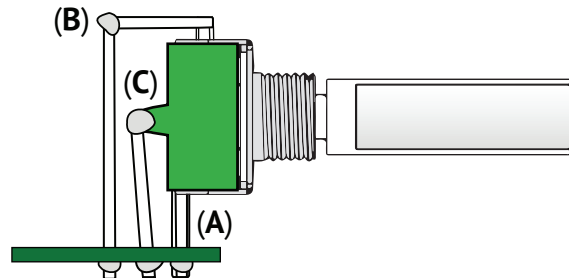
(C) (A)(A)(A) (C)



Encoder Bottom View
Three Pins Flattened Out



Note: The #3 bolt doesn't attach to anything. It's just used as a metal spacer between the knob and the encoder shaft
Any small piece of metal could work like #2 Nuts, Metal Rod, etc...



Encoder Side View After Soldering Onto Encoder PCB
A=Three Pins, B=Two Push Button Pins, C=Two Case Pins

Bourns Rotary Encoder P/N: PEC11L-4225F-S0015
Mouser P/N: 652-PEC11L4225FS0015
Detents: 30
Pulses Per Revolution: 15
Shaft Type: Flatted
Output Type: Quadrature
Channels: 2
Shaft Length: 25mm (Bummer!)
Cost: \$2.34 USD (Awesome!!!)



