

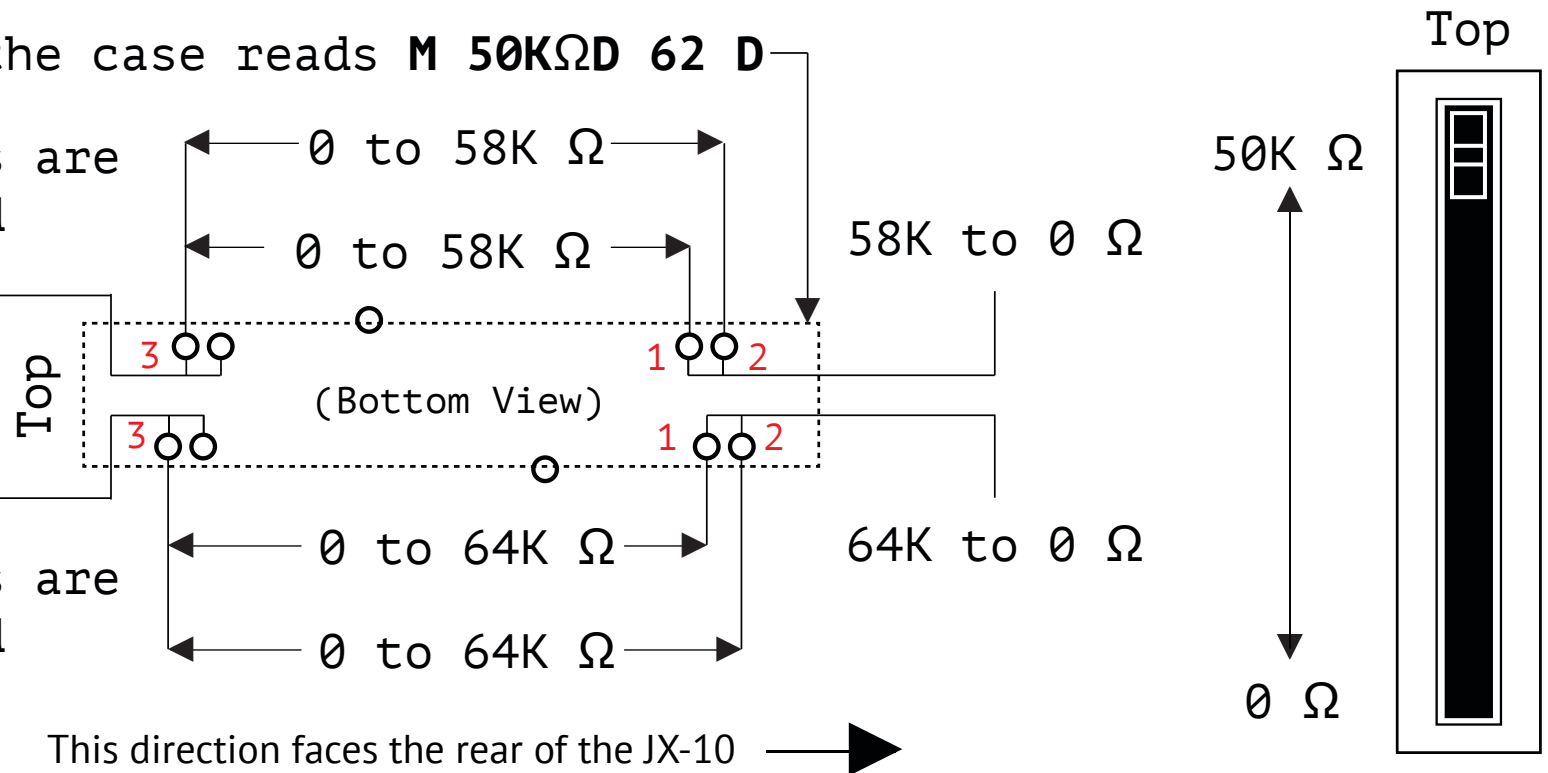
## JX-10 Slider VR1 (MASTER VOLUME)

The value of this slide potentiometer is 50K  $\Omega$  with a Logarithmic Taper. When measuring, the lever was moved from the minimum setting to the maximum setting (in the bottom view, Right to Left). All resistance values were measured with slider removed from the PCB. It is important to note that this slider is oriented on the PCB in the opposite direction of all the other sliders

This side of the case reads **M 50K $\Omega$  62 D**

These two pins are always shorted

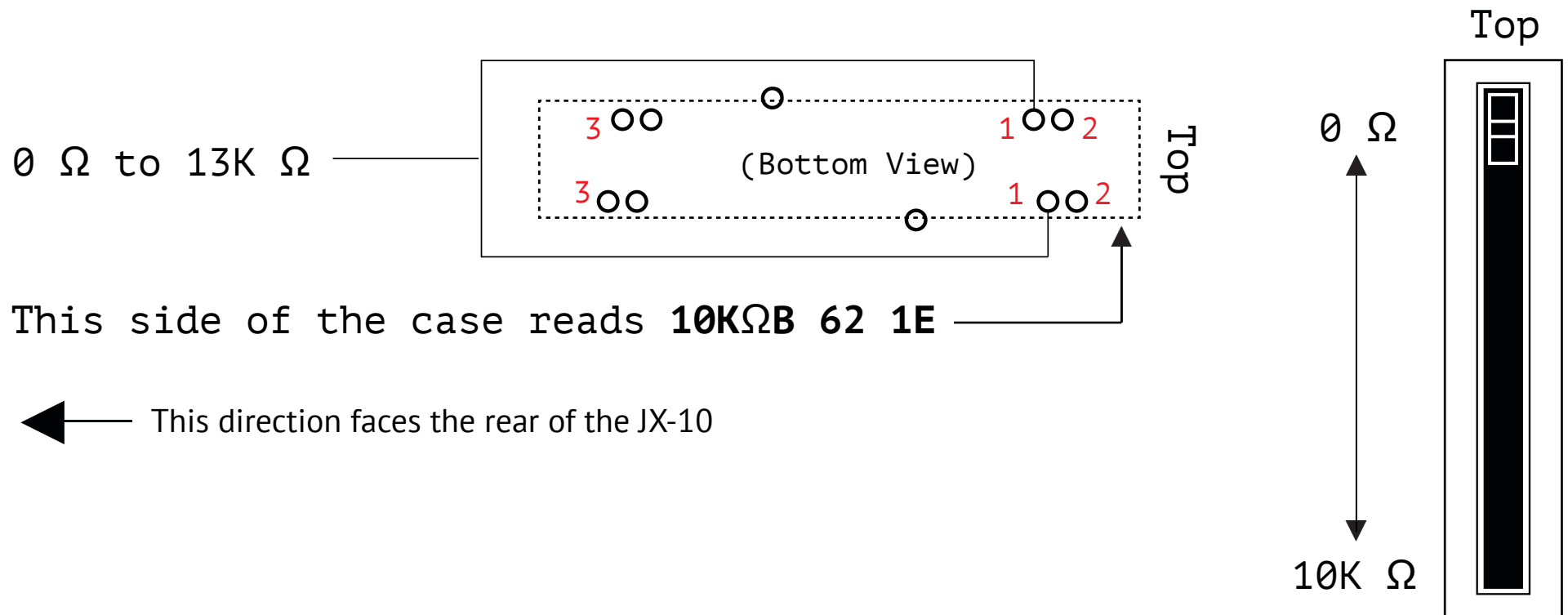
These two pins are always shorted



It was not unusual to find higher values of 58K  $\Omega$  and 64K  $\Omega$  when it was measured. This could be due to age, dirt or manufacturing tolerances

## JX-10 Sliders VR2 (C1), VR3 (C2), and VR4 (AFTERTOUCH)

The values for these slide potentiometers are 10K  $\Omega$  with a Linear Taper. When measuring, the lever was moved from the minimum setting to the maximum setting (in the bottom view, Right to Left). All resistance values were measured with slider removed from the PCB. It is important to note that these sliders are oriented on the PCB in the opposite direction of VR1. This means the slider values will decrease from a maximum value down to zero

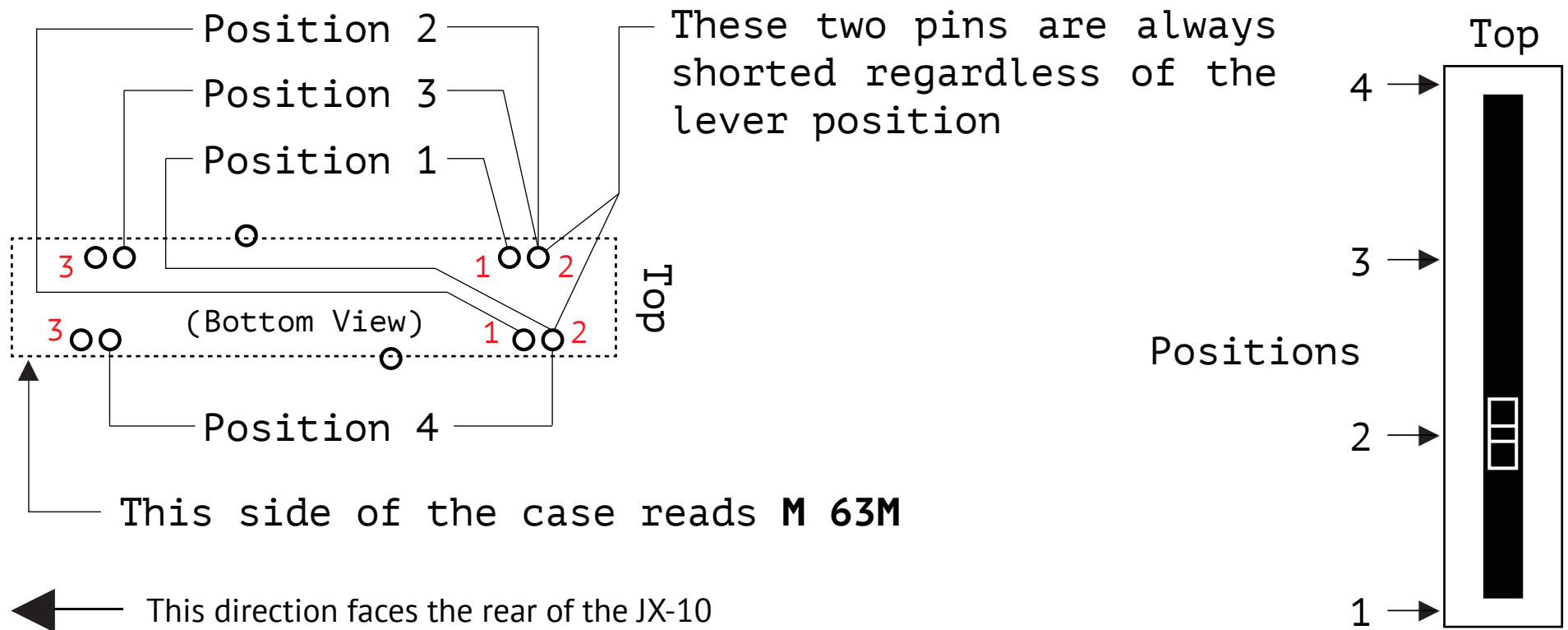


← This direction faces the rear of the JX-10

It was not unusual to find a higher value of 13K  $\Omega$  when it was measured. This could be due to age, dirt or manufacturing tolerances

## JX-10 Sliders S1 (VOICE MEMORY) and S2 (BEND RANGE)

Unlike other sliders on the Volume Board which are potentiometers, S1 and S2 act as 4-position ON/OFF switches. For example, when the lever is in Position 2, it acts as an ON switch because pin 2 shown in the upper row is shorted with pin 1 in the lower row. S1 and S2 both have 4 settings and 2 detents. However, S2 only uses two of those settings which are Position 1 (INT) and Position 2 (CART). All Positions were measured with slider removed from the PCB



## JX-10 Slider Dimensions

There are a total of 10 pins on each slider. 8 pins are used for connectivity and 2 pins are used for stabilizing the outer case and shielding. The dimensions and pin spacing for all 6 sliders is identical. However, board mounting orientation is reversed with VR1

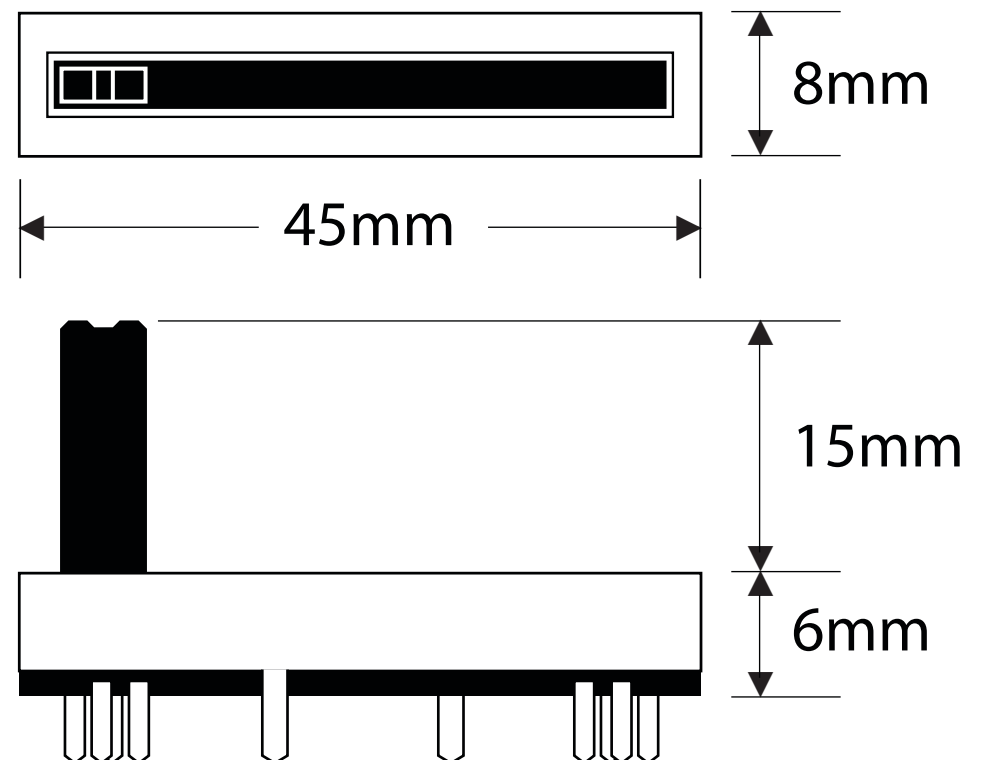
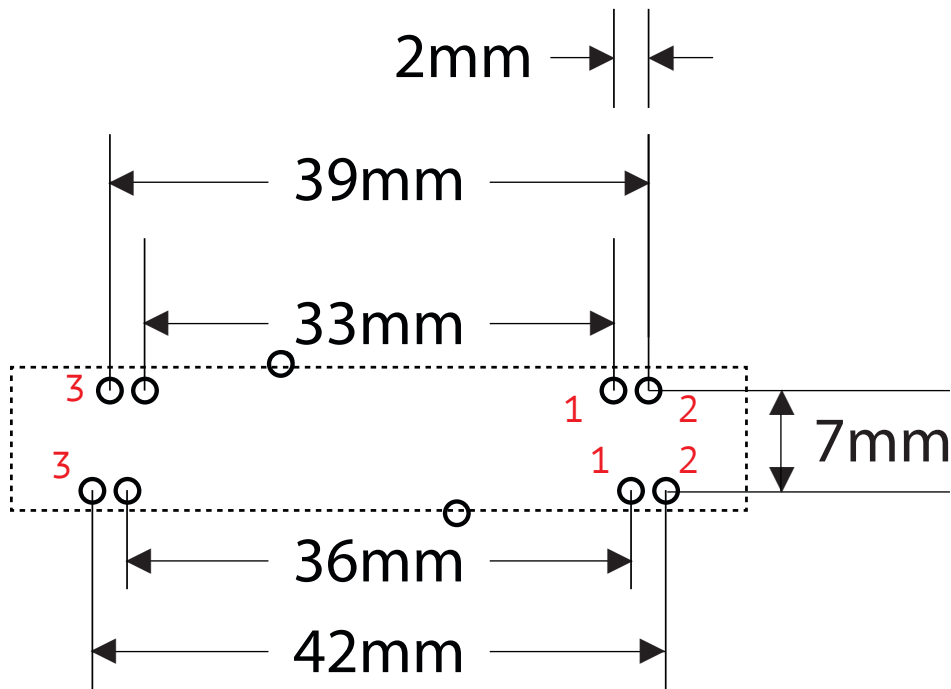
**Length:** 45mm

**Width:** 8mm

**Height:** 6mm

**Lever Travel:** 30mm

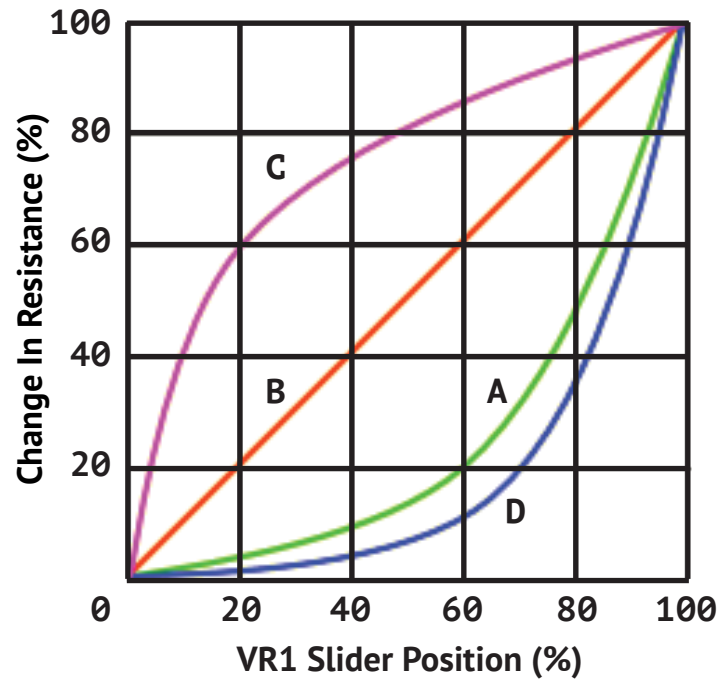
**Insulated Lever:** 15mm from case top to lever tip





# VR1 Slider Graph

Roland VR1 slider potentiometer is a “D” style Taper \*



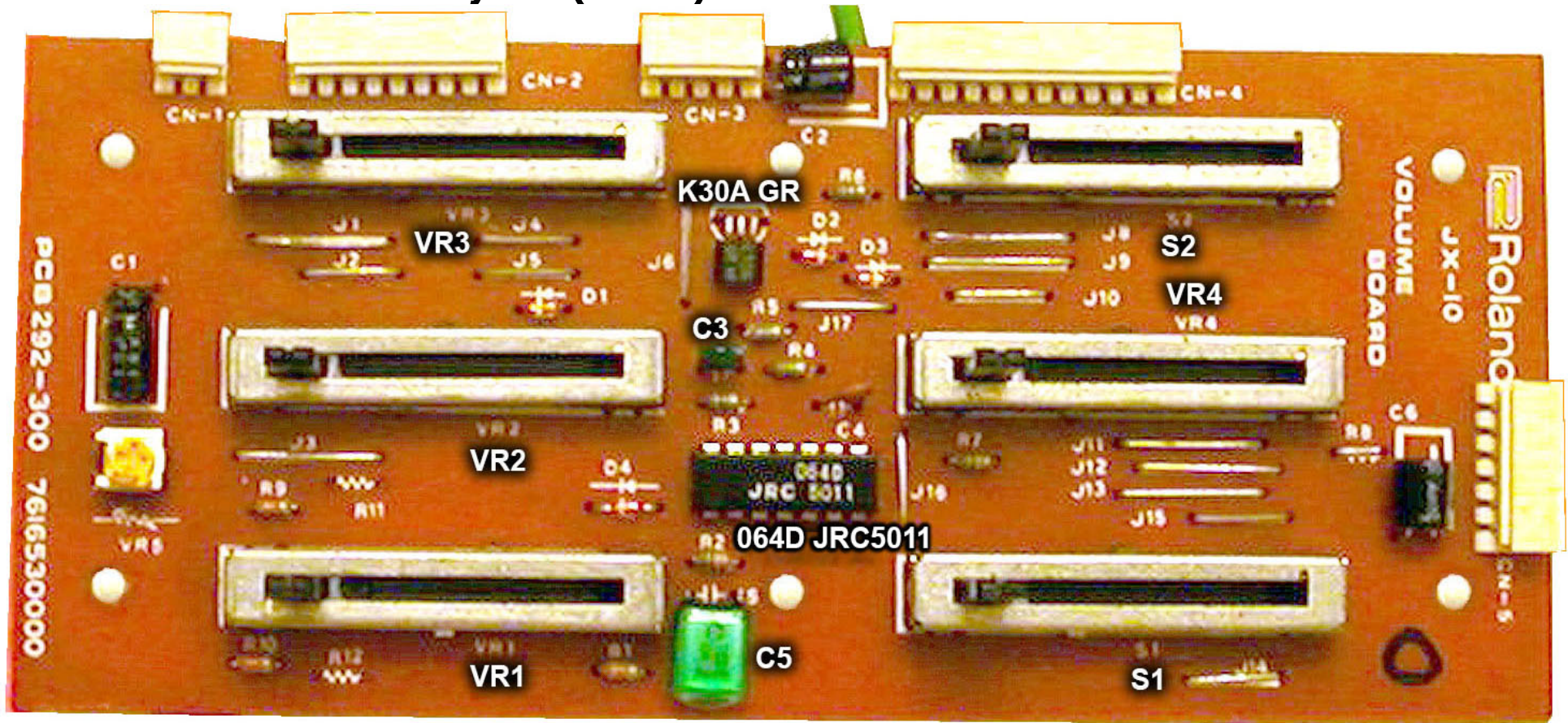
Taper

- C** = Anti-Log (85% resistance at 50% rotation point)
- B** = Linear (50% resistance at 50% travel point)
- A** = Log (15% resistance at 50% rotation point)
- D** = Log (10% resistance at 50% rotation point)

\* Once again, Roland insists on using odd-ball, hard to find components

VR2, VR3 and VR4 use the more common “B” style Linear taper

# JX-10 Volume Board Layout (Front)



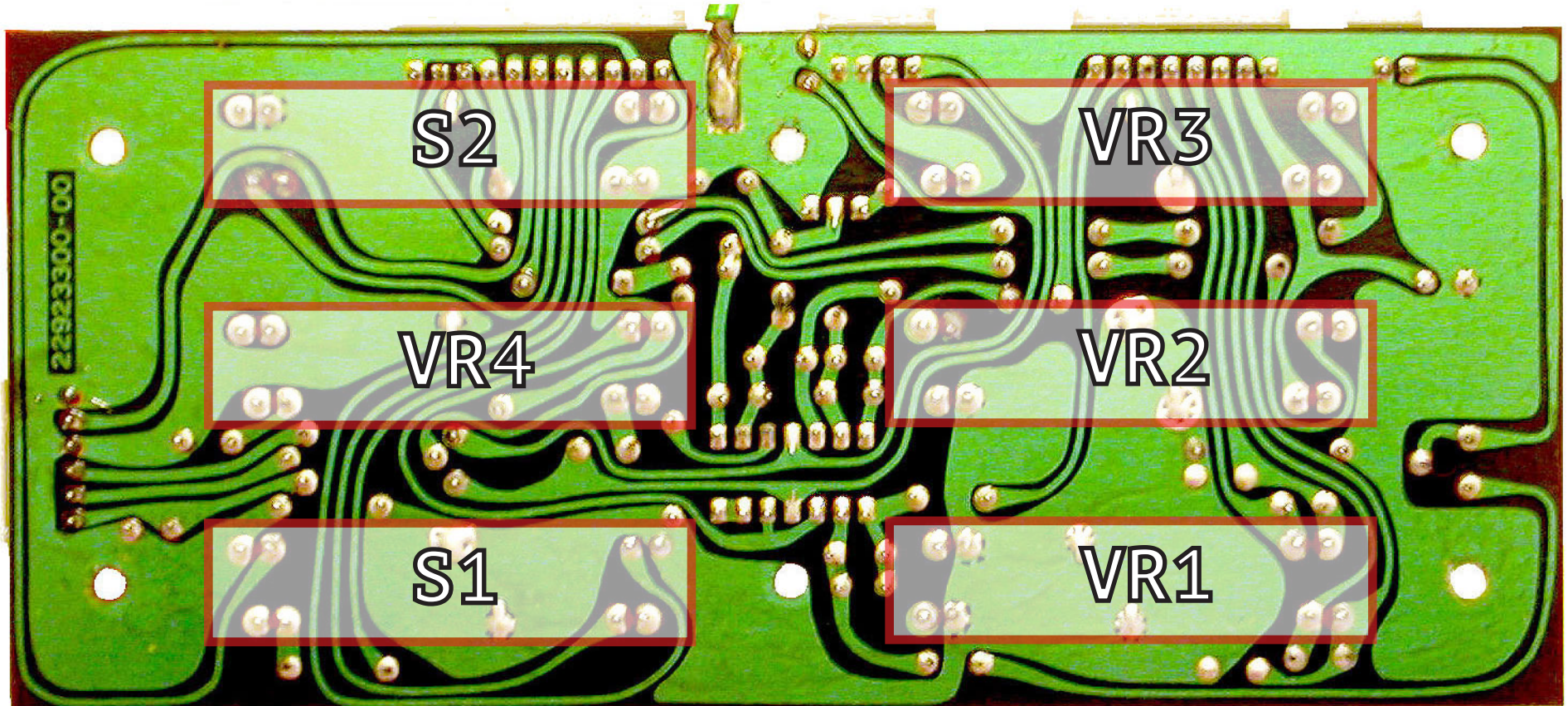
← This direction faces the rear of the JX-10

Volume Board components not shown in the JX-10 Service Manual are;

- |  |   |
|--|---|
| D1, D2, D3, D4 = 1SS133 Diode                        | R1 = 220 $\Omega$   |
| C1 = 10uF 16V Electrolytic Capacitor                 | R2 = 68K $\Omega$   |
| C2 = 47uF 16V Electrolytic Capacitor                 | R3, R4, R5, R6 = 1M $\Omega$                                  |
| C3 = 1nF 16V Film Capacitor                          | R7 = 180K $\Omega$  |
| C4 = 100pF 16V Ceramic Capacitor                     | R8 = Silkscreened but it's a jumper wire                      |
| C5 = 100nF 16V Film Capacitor                        | R9, R10 = 2.2K $\Omega$                                       |
| C6 = 47uF 16V Electrolytic Capacitor                 | R11, R12 = Silkscreened but no component                      |
| Q1 = K30A-GR   | VR1 = 50K $\Omega$ Logarithmic + crazy 8-pin arrangement      |
| IC1 = 064D JRC5011                                   | VR2, VR3, VR4 = 10K $\Omega$ Linear + crazy 8-pin arrangement |
| S1, S2 = 4 Position Switch + crazy 8-pin arrangement | VR5 = 2K $\Omega$ Trimpot                                     |



## JX-10 Volume Board Layout (Back)



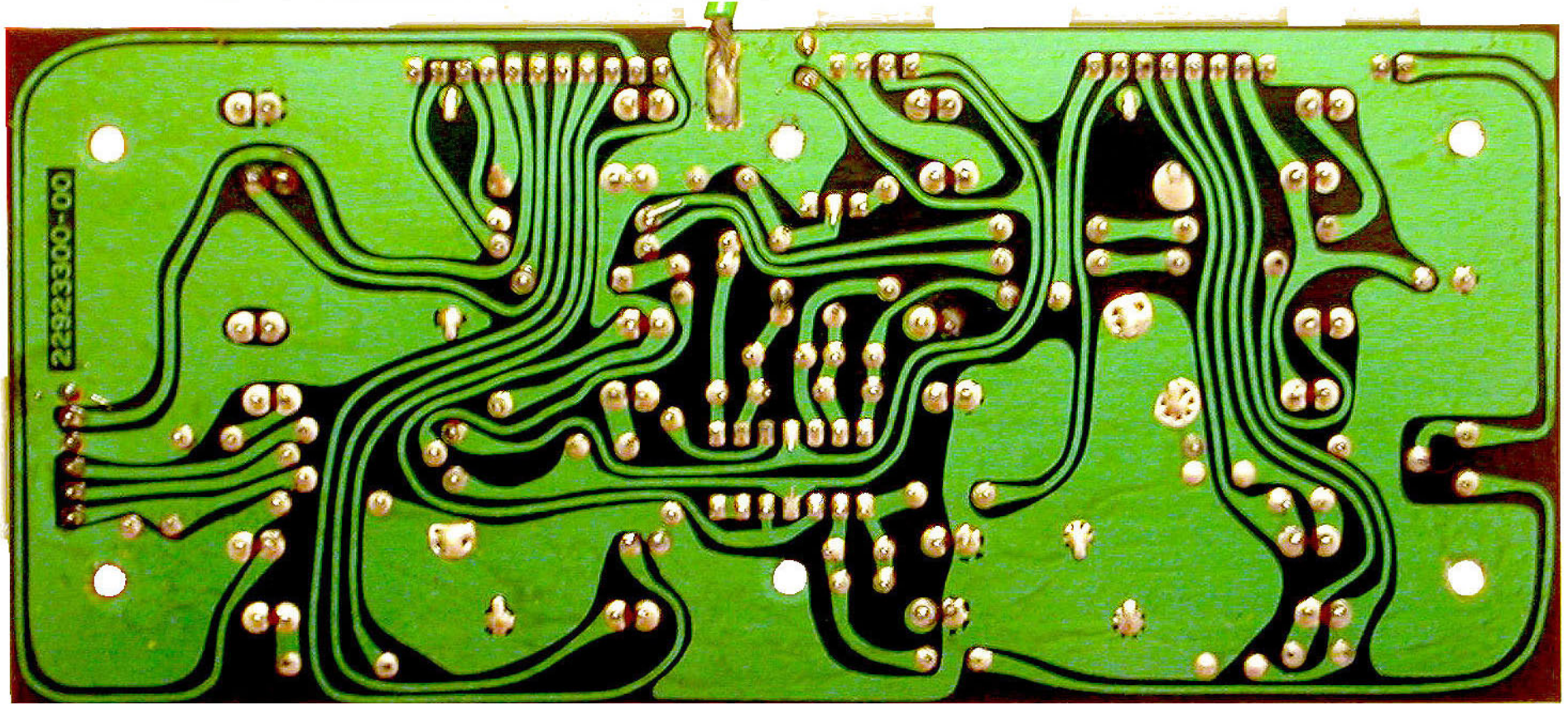
This direction faces the rear of the JX-10 →

Note that nearly half of all the pins on the sliders connect to eyelets on the PCB but have no traces and do not connect to any components

Compared to normal slider pots I've seen available for purchase, the JX-10's are unusual because they have a quad set of pins on each side which makes them difficult to source. Because these are so difficult to find and replace, some JX-10 owners carefully disassemble the original slider pots, clean them with DeoxIT Fader Lube and reassemble. Special care needs to be taken when cleaning since these are vintage sliders. It's very easy to accidentally remove the carbon layers inside which will render them useless

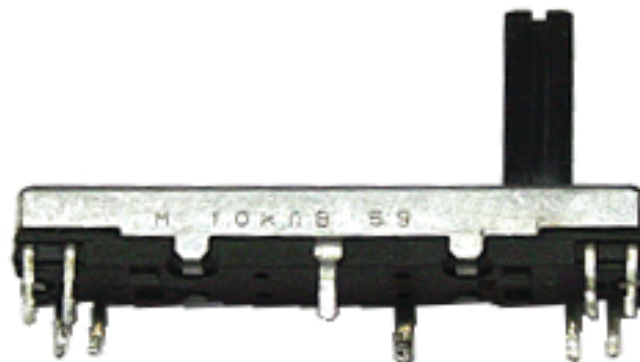


## JX-10 Volume Board Layout (Back - Without Overlays)



This direction faces the rear of the JX-10 →

## Crazy 8-Pin Configuration



# Volume Board Components / JX-10 Service Notes Aug 1986 (Complete Version)

