

TECHNICAL BULLETIN

R-60 ON / OFF Switch Retrofit

Some three years ago, the manufacturer of the channel ON/OFF switch used in the Audioarts R-60 console's IN-60 module discontinued that particular switch.

When we heard that the part was to be discontinued, we were unable to find another switch that would fit the same mounting hole as the original switch. We immediately purchased a very large supply of these original switches so that we could continue to supply replacement parts. Unfortunately, we have now exhausted that supply.

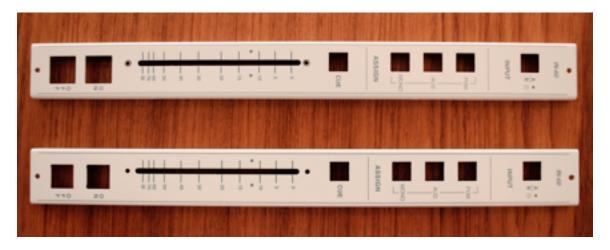
Consequently, we have selected a new switch based on our design criteria. Made by NKK, this new switch is slightly smaller than the old one. It features LED illumination with a standard bi-pin LED, providing more reliable contact than the flange-base LED "bulb" in the older switch. With contacts rated for at least 100,000 operations, this switch should be even more trouble-free.

Audioarts Engineering has developed two solutions for customers who need to retrofit these R-60 ON/OFF switches. This document will describe those options.

Option 1: Replacing the Module Faceplate

Wheatstone Part # 052412 IN-60 Retrofit Faceplate/Switches Assembly

Audioarts Engineering can supply a kit consisting of two new-style NKK switches and a replacement module faceplate that accepts these new switches. The photo below shows the old (top) and new (bottom) faceplates.

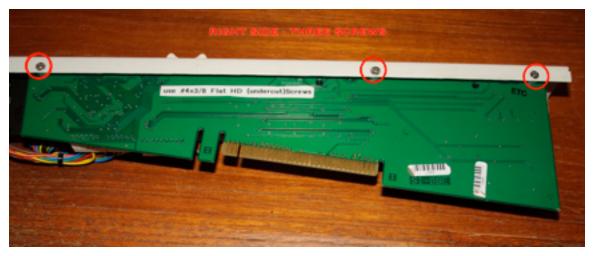


The new faceplate is identical in manufacture to the old one in every respect except for the size of the switch openings. However, the customer should bear in mind that a newly painted module won't look exactly like the older ones next to it, and that the switches will also be noticeably smaller.

Upon receiving the kit, the procedure for installing it is as follows:

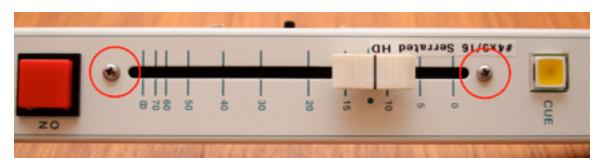
- 1) Remove the module from the console.
- 2) Carefully unplug the fader connector and the two switch connectors from the circuit board. Do not pull the connectors by the wires.
- 3) Using a #1 phillips screwdriver, remove five (5) flat-head screws from the side flanges of the faceplate. Refer to the photos below; the screws are circled.





- 4) Carefully lift the circuit board away from the old faceplate and place it in position on the new faceplate.
- 5) Reinstall the five (5) screws. **Do not overtighten** the screws.
- 6) Remove the fader knob by pulling it straight up from the faceplate.

7) Using a #1 phillips screwdriver, remove the two screws at the top and bottom of the fader slot. Refer to the photo below; the screws are circled.



- 8) Lift the fader away from the old faceplate and place it in the same position on the new faceplate. Reinstall the screws and fader knob.
- 9) Plug the fader connector and the two new switch connectors into the circuit board. The connectors are labeled ON, OFF, and FADER on the circuit board.
- 10) Reinstall and test the module in the console.

Option 2: Retrofitting a Single Switch

Wheatstone Part # 052410 IN-60 Retrofit Single Switch Assembly Yellow Wheatstone Part # 052411 IN-60 Retrofit Single Switch Assembly Red



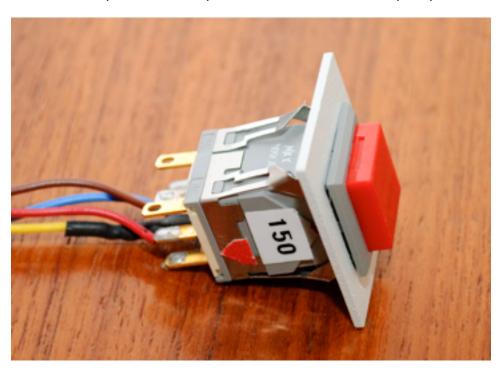
Audioarts Engineering can also supply a kit consisting of a single switch of the new NKK type and a special adapter plate.

The adapter plate provides an opening of the correct size to accept the new, smaller switch, and provides enough surface area to allow bonding to the existing front panel.

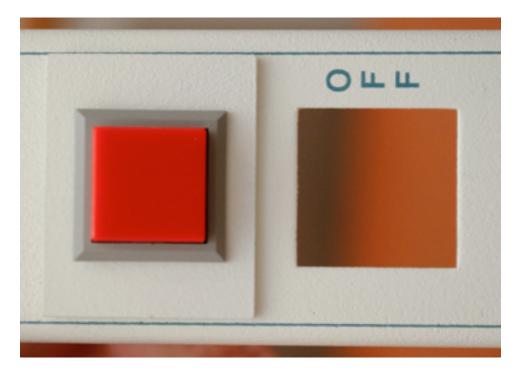
You will need to locally obtain some thin, double-sided adhesive tape for bonding the adapter plate to the module faceplate.

The procedure for installing this kit is as follows:

- 1) Remove the module from the console.
- 2) Unplug the worn-out switch from the circuit board. Remove the switch from its mounting hole and pull the wiring through.
- 3) insert the wire harness of the new switch through the hole in the adapter plate.
- 4) Push the switch into place and snap it into the hole in the adapter plate.



- 5) Apply thin double-sided adhesive tape to the side of the adapter plate that will face the module faceplate.
- 6) Insert the wiring harness through the hole in the module faceplate. Insert the switch, with the adapter plate's long sides at the top and bottom. Center it carefully and press it into place.
- 7) Connect the wiring harness of the new switch to the module circuit board.



8) Reinstall and test the module in the console.