

**Technical Note #5**

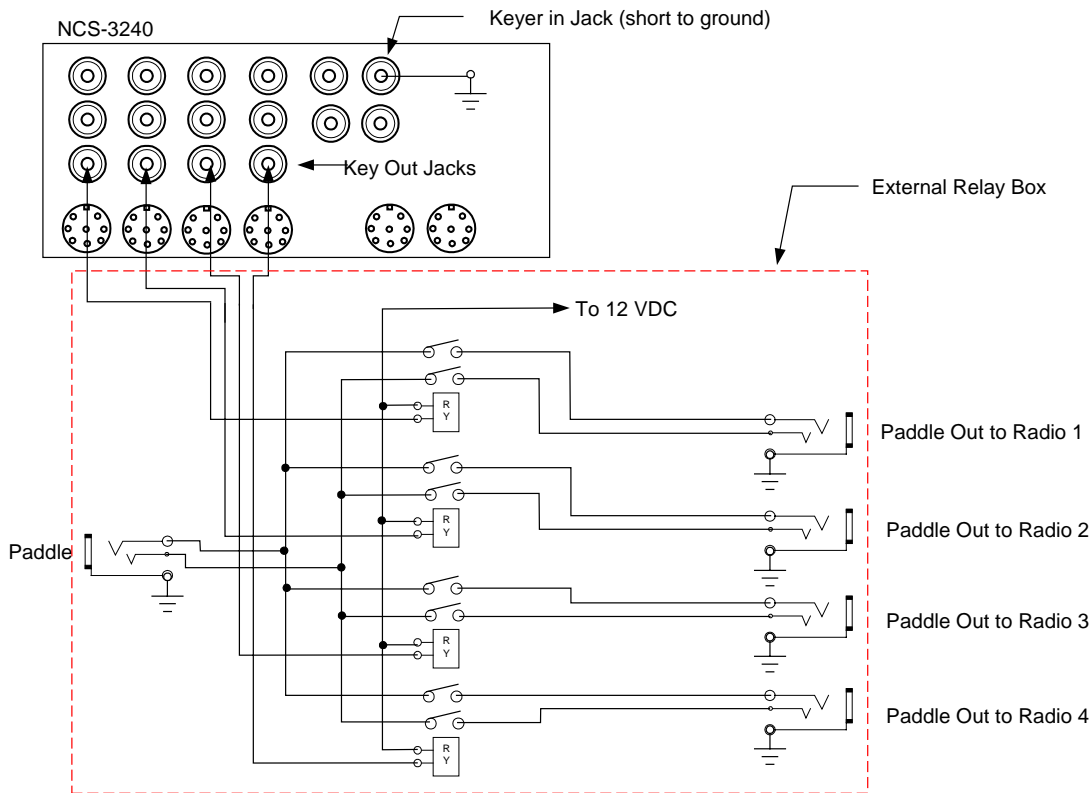
**Title: Automatically Switching CW Paddles using the NCS-3240**

**General Description**

The NCS-3240 is designed to switch either a CW hand key or the output of an electronic keyer to the selected radio. However, it does not directly handle switching of a CW paddle. With the addition of an *external relay box*, the Multi-Switcher can automatically switch your paddle among the four connected radios. This, of course, requires that each radio have an internal electronic keyer or a dedicated external electronic keyer.

**Relay Box Circuit**

The following diagram shows the *external relay box* wiring and connection to the Multi-Switcher. While the diagram shows 12 VDC relays, either 12 VDC or 5 VDC relays can be used.





---

### **Operation**

Each of the relays used for switching the CW paddle are controlled by the RAD 1 – RAD 4 KEYOUT jacks on the rear panel of the Multi-Switcher. Additionally, the KEY IN jack must be shorted to ground as shown in the diagram (this is accomplished by inserting a shorted phono plug into the KEY IN jack).

When a Radio Select pushbutton (RAD 1 – RAD 4) on the front of the Multi-Switcher is activated the CW paddle is switched to the selected radio.