URB (Soft key) in SB220 (or any high voltage positive bias amplifier)

Rev2 8/1/25

This unit is ready to fit any 60 to 120V + dc relay amplifier. This standard URB unit has been factory modified to run directly from the SB220 (or any other) 120V+ dc supply and relay. You must be sure:
1.) For 120Vdc +, the URB is powered through an additional external 10K 2-watt resistor. It is a little better to locate this resistor at the 120 Vdc tap point. (In an SB220 amplifier the 10K resistor connects to the red relay wire. It should ideally be near the +120V supply although this isn't absolutely necessary.)

2.) Consult us for other relay voltages. This using will work between 12Vdc and 300Vdc with a resistor change.

3.) A black wire or wires should be used to ground the URB GND pad and the URB RLY- pad to any convenient chassis ground. See photo and note the two "Ground" pads. Both Ground pads are grounded in amplifiers like the SB-220.

4.) The Relay jack wire that originally connects to the relay coil is removed from the relay terminal. The free end moves to the unmarked hex shaped URB pad labeled "Relay jack" (see photo). **Note: There must be continuity between the rear SB220 panel relay jack center pin and the hex-shaped solder terminal on the buffer board. NEVER wire the relay coil to this low voltage pad.**

5.) The relay terminal which formerly connected to the relay jack must be wired to the URB RLY+ terminal in positive relay voltage amplifiers. This would include the SB220, but NOT include the SB200 or 30L-1

6.) This board can mount with supplied 3M tape, plastic ties, or small insulated screws. Do not ground the transistor!

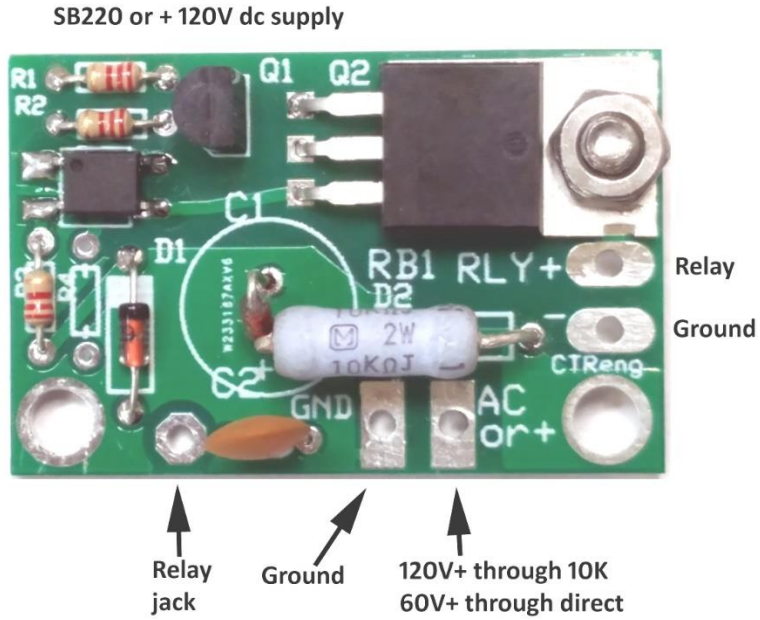

Figure 1 wire connections

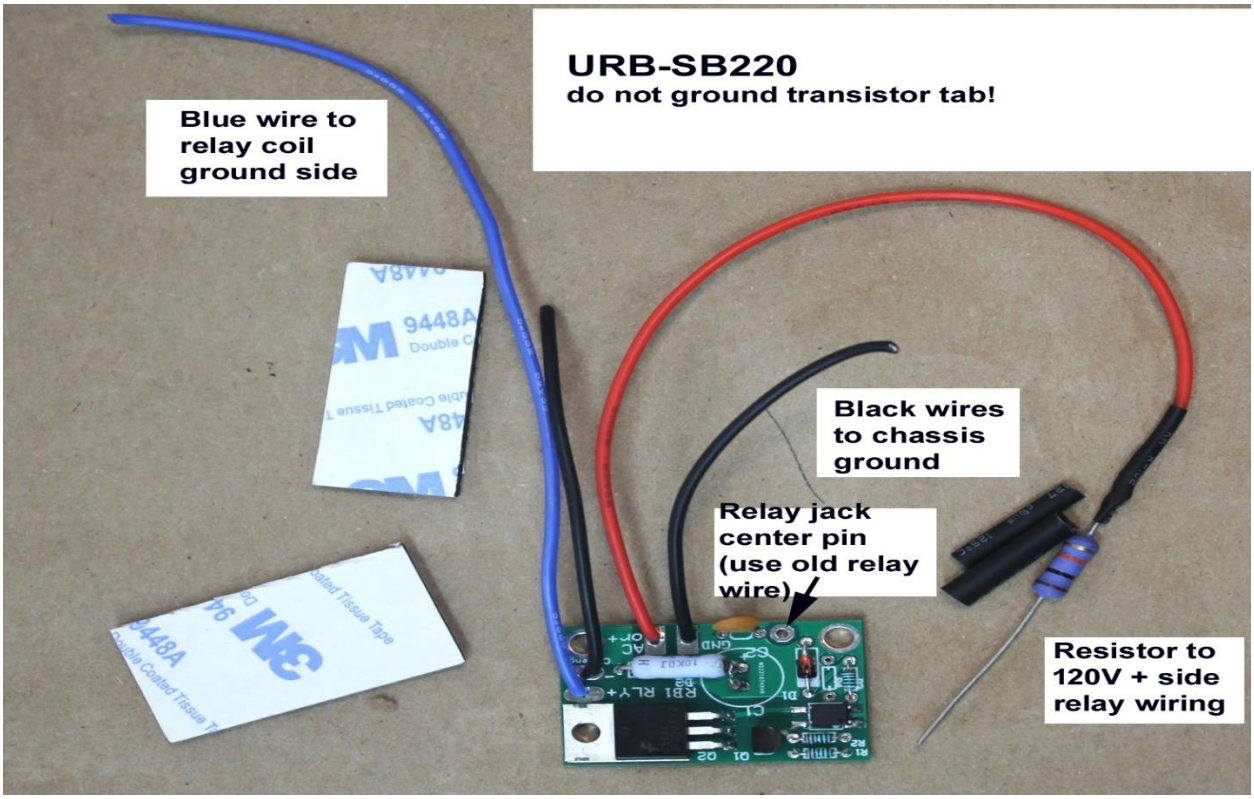

Figure 2 connections