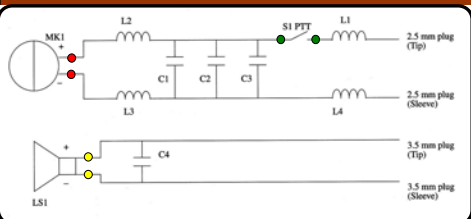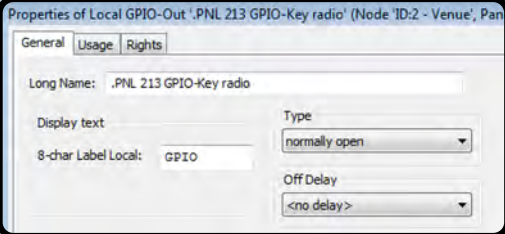# Pete's Riedel Tips

Sometimes a request is made to have a radio channel which listens to a comm channel. Short of adding a Riface or other repeater to your show, a stand alone radio will work with a little destructive custom modification to a fist mic.
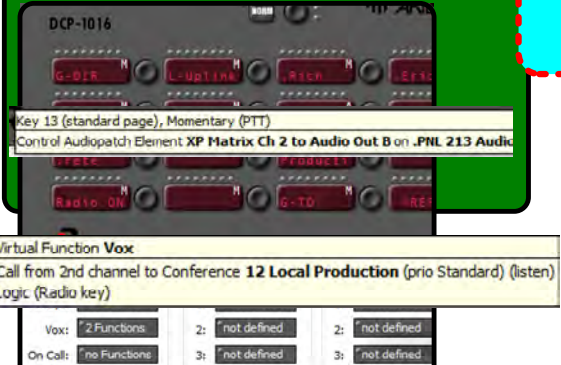
Step 1. Modify a standard speaker mic with In, Out and Push to talk connections. Open the speaker mic. Wire a female XLR to the Mic wires (●) which you will disconnect. Pin 1 and 3 to the (–) and Pin 2 to the (+). Wire a male XLR to the speaker (●) connections Pin 2 and 3. Wire a pair of wires to each side of the switch (●). How you connect these will vary with your Riedel system. We wired a db9 Female connector to pins 1&6 for GPO 1. Do not discard or modify the circuit card in the mic. Resistors, coils and capicitors must remain in the circuit for proper operation.

Step 2. In my case I located the radio at a panel. The B audio output of the panel will be the audio feed. Set the crosspoint from Matrix Ch. 2 to Audio Out B to "MUTE ON" and "Adjust from command" checked.

Step 3. Set the gain of the Audio Out B amplifier to -25 dB. The input to the radio is a mic input and the rough level setting is on this amp. The fine adjustments will be done from a button on the panel.

NOTE: Be aware that extended transmit time on a portable radio may burn it out. The logic times only turns off the transmit every 20 sec for a tenth of a second. Increase the turn off time to 1 second to be safer. However I never have had that issue as long as the VOX is set high enough to stop when the Talker stops.

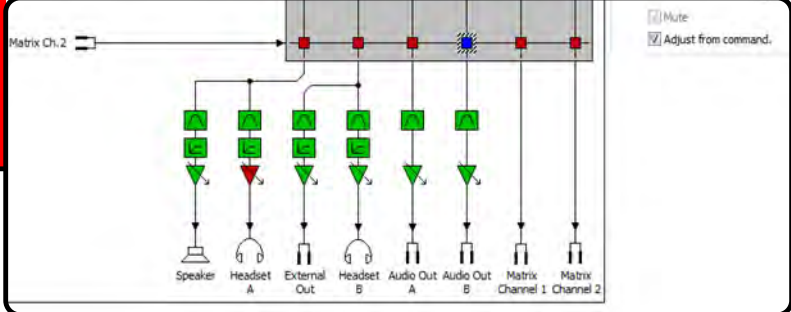**Step 4.** Create GPO 1 and set it to Normally open.

Step 5. Program a button on the panel with a "Control Autopatch" function set to the panel crosspoint we set in step 2. Name the button "RadioOFF"
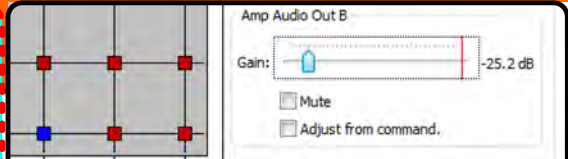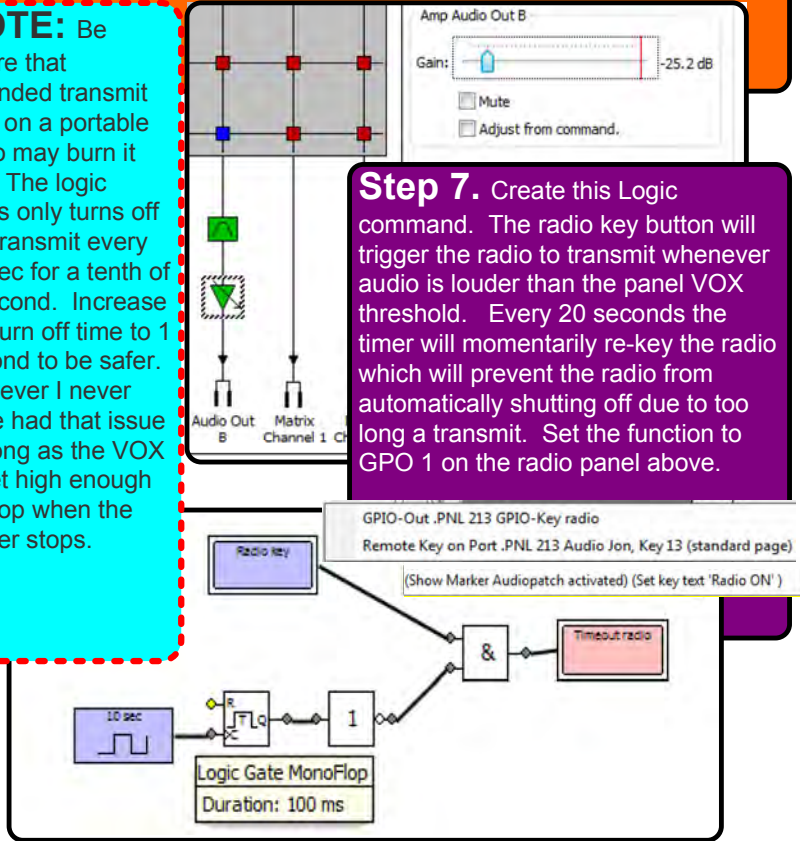

Step 6. Enter 2 functions in the "VOX" virtual functions. Note the Listen only to conference.

Step 7. Create this Logic command. The radio key button will trigger the radio to transmit whenever audio is louder than the panel VOX threshold. Every 20 seconds the timer will momentarily re-key the radio which will prevent the radio from automatically shutting off due to too long a transmit. Set the function to GPO 1 on the radio panel above.